

June 23, 2005

Ms. Beth A. O'Donnell  
Executive Director  
Kentucky Public Service Commission  
P. O. Box 615  
Frankfort, KY 40602

RECEIVED

JUN 23 2005

PUBLIC SERVICE  
COMMISSION

RE: PSC Case No. 2005-00239

Dear Ms. O'Donnell:

Enclosed for filing with the Commission are the original and ten copies of Columbia Gas of Kentucky's Application for a Certificate of Convenience and Necessity. The filing includes an original and three copies of the maps and permits due to its cumbersome nature.

Please call me at (859) 288-0242 should you have any questions about this matter.

Sincerely,



Judy Cooper  
Director, Regulatory Policy

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JUN 9 8 2005

PUBLIC SERVICE  
COMMISSION

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of the Application of Columbia )  
Gas of Kentucky, Inc. for an Order Issuing a )  
Certificate of Public Convenience and Necessity ) Case No. 2005- 00239  
to Construct a Natural Gas Pipeline Near )  
Georgetown, Kentucky )

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APPLICATION OF COLUMBIA GAS OF KENTUCKY, INC.

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The petition of Columbia Gas of Kentucky, Inc. ("Columbia") respectfully states:

(A) That applicant is engaged in the business of furnishing natural gas services to the public in certain counties in the Commonwealth of Kentucky, pursuant to authority granted by the Commission.

(B) That Columbia's full name and post office address is:

Columbia Gas of Kentucky, Inc.  
2001 Mercer Road  
P.O. Box 14241  
Lexington, KY 40512-4241

(C) That Columbia's Articles of Incorporation previously have been filed with the Commission in Case No. 2000-129 and are incorporated herein by reference.

(D) That the proposed construction is or will be required by the public convenience and necessity for the following reasons.

On July 17, 2001, the Kentucky Public Service Commission issued its Order in Administrative Case No. 384, wherein it initiated a Management Audit of the state's five major natural gas utilities. The management audit was focused on natural gas planning and procurement strate-

gies. The Commission retained Liberty Consulting Group (“Liberty”) to perform the audit. On November 15, 2002, Liberty issued its Final Report, with specific recommendations for each natural gas utility. With regard to Columbia, Liberty Recommendation No. A.1.2 stated, “Columbia should augment its peak day forecast to incorporate potential cost tradeoffs regarding the selection of peak day criteria.”

This Liberty recommendation stemmed from a concern that Columbia took on too great a risk in its ability to meet peak day criteria compared to the state’s other natural gas utilities. Pursuant to the Liberty recommendation, Columbia conducted a study incorporating the costs of capacity resources to adjust its capacity portfolio from a 1-in-10 risk level to risk levels of 1-in-15, 1-in-20, 1-in-30 and 1-in-33. Based on the results of the study, Columbia proposed to adjust its risk level to 1-in-20, and by letter dated August 18, 2004, the Commission’s management audit staff accepted Columbia’s recommendation and closed Recommendation No. A.1.2.

In order to adjust its risk level from 1-in-10 to 1-in-20, Columbia needed to secure additional interstate pipeline capacity for peak day design, which Columbia has done. A part of this new capacity will be obtained from Columbia Gas Transmission Company (“Columbia Transmission”) via Columbia’s existing delivery point with Columbia Transmission at Lake Carnico. However, service enhancements are necessary on Columbia’s system near Georgetown in order to increase its deliverability via the Lake Carnico delivery point.

As shown on the map attached hereto as Attachment 1, Columbia receives gas to supply its central Kentucky markets (including Lexington, Frankfort and Georgetown) from Columbia Transmission at the Lake Carnico Point of Delivery. From the Lake Carnico Point of Delivery, the gas enters Columbia’s Line DE, the 720 psig line serving the Toyota Plant, and flows west toward Georgetown. Near Georgetown, the gas passes through the Turner Regulator Station and

into Columbia's 305 psig DKL system. The DKL system feeds into Columbia's 250 psig DKT system used to supply gas to Georgetown, Lexington and Frankfort.

The DKL system is mostly eight-inch line, and due to its diameter and limited operating pressure, this section of line limits the amount of gas that can be flowed into the DKT system serving Georgetown, Lexington and Frankfort. By this Application, Columbia is requesting the issuance of a Certificate of Public Convenience and Necessity so that it may extend the twelve-inch DE line approximately seven miles from the twelve-inch line feeding Turner Regulator Station to the Georgetown-Frankfort line. The map attached hereto as Attachment 2 shows the existing DKL line, as well as the proposed location of the new extension of the DE line. Construction of this DE line extension will enable Columbia to increase its deliverability from the Lake Carnico Point of Delivery, which in turn will permit Columbia to meet its new 1-in-20 peak day design level.

Columbia has acquired the majority of the necessary right-of-way agreements and does not anticipate having to initiate eminent domain proceedings on the remaining properties in order to acquire the rights-of-way necessary for construction of the pipeline. However, should such eminent domain proceedings in the Commonwealth's Circuit Courts become necessary, a Certificate of Public Convenience and Necessity is a prerequisite, and prompt action by the Commission is essential to ensure that there are no avoidable delays in this important supply project.

While this project is clearly for the betterment of the distribution system to increase Columbia's ability to meet peak day supply needs of the communities that it presently serves, it will not significantly impact competition in the construction area or add additional customers because Columbia already has facilities in the general area of the new line, and already provides service in this area.

With Commission approval of this construction project, Columbia plans to begin construction of the pipeline in mid-August, in time to be operational for the 2005-2006 heating season. A full description of the proposed route, including a description of the manner in which the proposed pipeline will be constructed, is attached hereto as Attachment 3. Also attached as Attachment 4 hereto is an Engineering Analysis. Attachment 5 hereto contains copies of the permits from the proper public authorities for the proposed construction.

In terms of financial analysis, the capital cost of the pipeline extension project is estimated to be \$3,883,375. Columbia does not anticipate the need to issue any equity or debt to finance this construction project. The capital outlay associated with this project will be supported by a contribution from Columbia Transmission. There is not expected to be any additional incremental margin or revenue created by this project because, as explained above, the project is being undertaken to secure additional interstate pipeline capacity for peak day design.

A breakdown of the project cost for the line extension is as follows:

Costs related to constructing 38,500 feet of 12-inch steel line:	\$3,313,525
Costs Related to Acquiring Rights of Way and Other Costs:	\$ 569,850
Total Capital Dollars:	\$3,883,375

The projected annual operating cost for the proposed pipeline is \$13,362.66.

Construction of this pipeline will upgrade Columbia's existing distribution system serving the central Kentucky area. These improvements will ensure Columbia's ability to provide reliable quality service consistent with a 1-in-20 risk level.

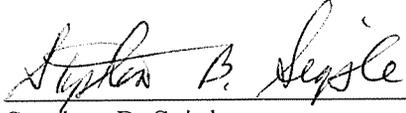
**WHEREFORE**, in view of the importance of this project and the urgency involved, and so that Columbia may make the most of the 2005 construction season (and begin construction by mid-August 2005), Columbia asks that this honorable Commission expeditiously consider Co-

lumbia's request and issue a Certificate of Public Convenience and Necessity pursuant to KRS § 278.020 and KAR 807 5:001 Section 9(2), authorizing Columbia to extend its Line DE and construct a twelve-inch gas pipeline from Columbia's Turner Regulator Station to Columbia's Georgetown-Frankfort line, as shown on Attachment 2.

Dated at Columbus, Ohio, this 23<sup>rd</sup> day of June 2005.

Respectfully submitted,

**COLUMBIA GAS OF KENTUCKY, INC.**

By:   
Stephen B. Seiple  
Lead Counsel

Stanley J. Sagun, Assistant General Counsel  
Stephen B. Seiple, Lead Counsel  
200 Civic Center Drive  
P.O. Box 117  
Columbus, Ohio 43216-0117  
Telephone: (614) 460-4648  
Fax: (614) 460-6986  
Email: sseiple@nisource.com

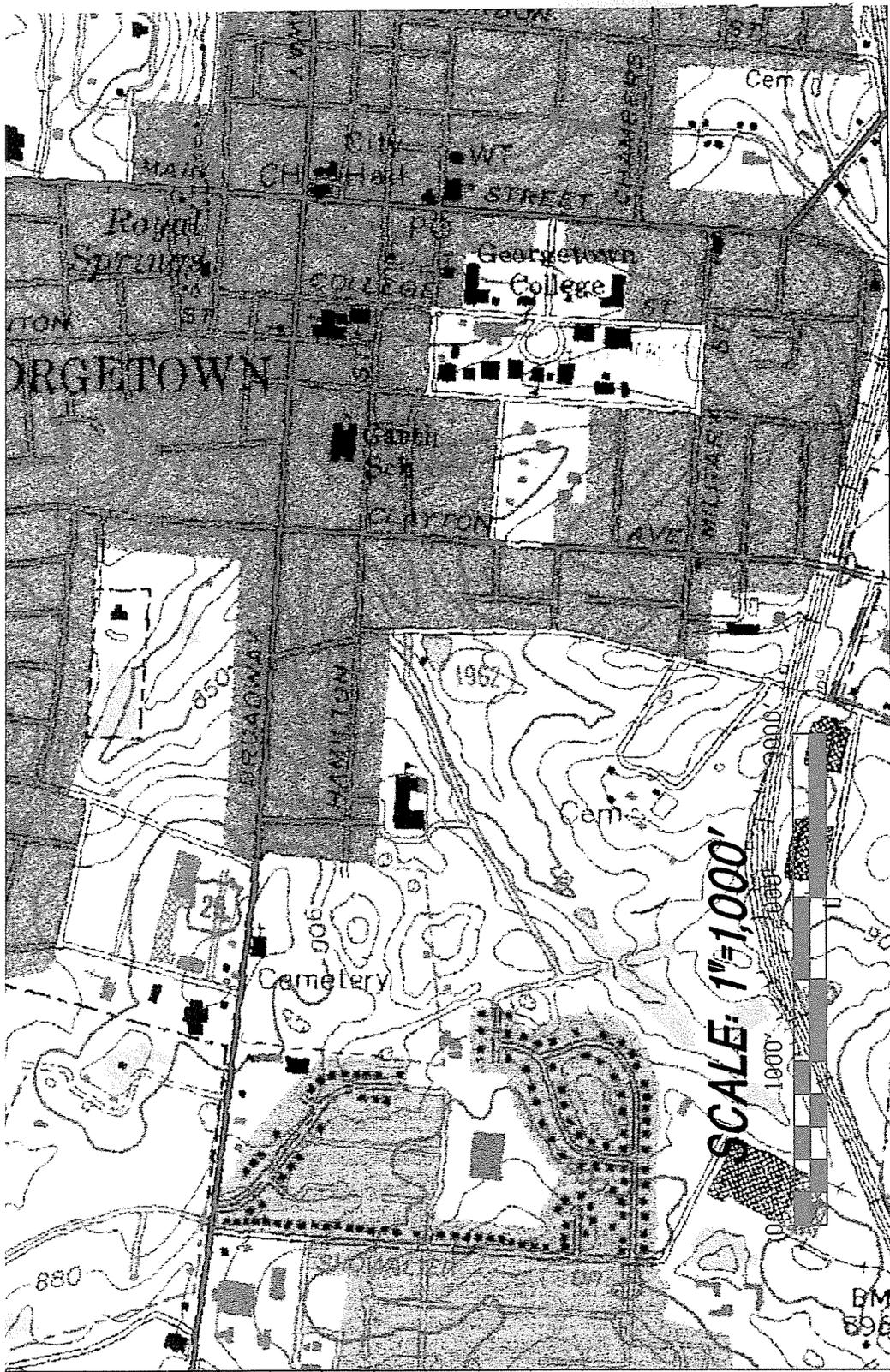
Richard S. Taylor  
225 Capital Avenue  
Frankfort, Kentucky 40601  
Telephone: (502) 223-8967  
Fax: (502): 226-6383

Attorneys for  
**COLUMBIA GAS OF KENTUCKY, INC.**

**ATTACHMENT 1**  
**Columbia Central Kentucky Map**



**ATTACHMENT 2**  
**Map Showing Proposed Construction**



# Columbia Gas of Kentucky

A NiSource Company

Attachment 2

**ATTACHMENT 3**  
**Description of Proposed Route and Construction**

**Columbia Gas of Kentucky, Inc.**  
**DE Line Extension**

**Description of Location, Route and Construction**

General

Columbia Gas of Kentucky, Inc. (“Columbia”) seeks authorization from the Public Service Commission of Kentucky to construct a twelve-inch steel pipeline, approximately seven miles in length, from its Turner Regulator Station north of Georgetown, Kentucky to its Georgetown-Frankfort line west of Georgetown, Kentucky.

Route

The project begins at a tie-in located at the existing Columbia Turner Regulator Station located near the intersection of Delaplain Rd. and Interstate 75 with a twelve-inch steel pipeline. The route goes southwest approximately 6,400 feet to an open area where a directional drill will be set up to bore under Interstate 75 to the west. Once on the west side of Interstate 75, the route then goes south paralleling the Norfolk Southern railroad track on the west side, then crossing to the east side for approximately 11,800 feet. The route then crosses the railroad track to the west and goes west approximately 4,000 feet crossing Dry Creek and State Route 25 to the west. It then parallels State Route 25 on the west side to the south for approximately 4,500 feet to the northern edge of the Cardome Academy property. From there the route goes west on the Cardome Academy property approximately 1,500 feet, then south approximately 800 feet. It then goes west approximately 1,200 feet to an overhead electrical easement. From there the route continues south in the overhead easement for approximately 3,400 feet where the Elkhorn Creek directional drill will begin. The length of this drill will be approximately 700 feet and will exit on the north side of State Route 460 near State Route 62. The route will continue west paralleling State Route 460 on the north side for approximately 1,400 feet, then crossing State Route 460 to the south and paralleling State Route 62 for approximately 4,300 feet. The route then ties into an existing twelve-inch steel pipeline at the intersection of State Route 62 and State Route 460B. The length of the DE Extension project is approximately 38,500 feet of twelve-inch steel pipeline. Approximately 32,300 feet of the project will be in private easements. The line is a distribution pipeline designed as a Class 3 location transmission line throughout the proposed route.

Construction Start Date

It is Columbia’s desire to obtain Commission approval for the Application for a Certificate of Public Convenience and Necessity and to complete eminent domain proceedings

for outstanding rights of way so that it may begin construction of the pipeline on June 20, 2005.

### Pipeline Specifications

The proposed twelve-inch pipeline will meet the following engineering specifications:

- Twelve-inch nominal pipe size (12.75 inch O.D.) made from carbon steel
- a wall thickness of .203 inches
- a fusion bond epoxy coating of 13-15 mills thickness for open trenching
- a dual fusion bond coating of 30 mills minimum thickness for boring purposes
- a Specified Minimum Yield Strength 60,000 psi, 1911 psig @ 100% SYMS

### Pipeline Operating Conditions

Design pressure and MAOP of 720 psig, resulting in stress levels of 37.7% of SYMS.  
Test pressure of 1080 psig.

720 psig Design Pressure	37.7% SMYS
1080 psig Hydrostatic Test Pressure	

### Specific Construction Details

#### (1) Welding

Welding of the joints of pipe will be conducted in conformance with the Federal Department of Transportation (“DOT”) Regulations, 49 C.F.R. Part 192, Sub-Part E, entitled Welding of Steel in Pipelines and 807 KAR 5:022, Section 5, entitled Welding of Steel in Pipelines.

The pipe joints will be welded together and placed either along the side of the trench or in the excavation After each weld is completed, a qualified inspector will visually inspect it. Radiographic inspection of the welds will be performed in accordance with 49 C.F.R. Part 192 and 807 KAR 5:022.

(2) Pipe Coating and Cathodic Protection

All pipe will be protected with an external coating prior to its placement in the trench. An electronic holiday detector will be passed over the sections of pipe as they are coated at the mill to check for faults in the coating. Any faults (holidays) that are detected will be repaired before the coated line is accepted for delivery.

The welded joints will be field coated and wrapped to provide coating protection equal to the protection afforded the other portions of the pipe. The coated joints, as well as the lengths, will be checked with the holiday detector and all faults will be repaired prior to placing the line in service.

The line will be installed with insulated fittings at the tie-in points and cathodically protected with high potential magnesium anodes that will be distributed along the pipeline to minimize deterioration from corrosion.

(3) Hydrostatic Testing

The in-place testing of the completed pipeline will be done in accordance with 49 C.F.R. 192 and 807 KAR 5:022. Such testing will entail the pipeline being filled with water and held at a minimum of 150% of its 720 psig future MAOP throughout the required test period. Water discharged after testing will be released in accordance with all of the requirements imposed by governmental agencies and therefore will be done in a manner that will prevent erosion, contamination or ecological damage to the area. If necessary, test water will be sampled and filtered prior to disposal.

(4) Roads and Highway Crossings

The majority of the project will be open trenched with approximately 1,500 feet of it being directional drilled. The proposed areas to be directional drilled are: Interstate 75, Dry Creek, State Route 25, Elkhorn Creek and State Route 460. These activities will be conducted in a manner whereby the disruption of service is minimized.

(5) Stream Crossings

The crossing of Cane Run Creek and any small runs will be done by the open cut method. The crossing of the Dry Run Creek will be by directional bore. Actual construction conditions will dictate the method of construction used to cross Elkhorn Creek, and the method of crossing the Elkhorn Creek likely be left to the contractor. Columbia will construct these crossings pursuant to the conditions set forth in its Army Corps of Engineers Nationwide Permit.

(6) Drainage Tile Field Crossings

Any drain tile that is damaged, cut, or removed by pipeline construction activity will be replaced or repaired to the landowner's satisfaction. Preplanning with the affected property owners should minimize drain tile damage.

(7) Operating and Maintenance Policy

The proposed pipeline shall be operated and maintained in accordance with the applicable provisions of 49 C.F.R. Part 192 and 807 KAR 5:022.

(8) Safety During Construction and Operation

The pipeline shall be constructed and operated in accordance with the aforementioned paragraphs and under the supervision and inspection of qualified personnel.

(9) Valves, Blowdowns and Smart Pigging

Isolation valves will be installed at each end of the pipeline and at a location near the center of the pipeline, with blowdown valves located on each side of the isolation valve. The pipeline is designed to allow for future DOT smart pigging requirements.

**ATTACHMENT 4**  
**Engineering Analysis**

## Engineering Analysis

In order for Columbia Gas of Kentucky, Inc. (“Columbia”) to obtain the incremental gas supply needed to satisfy the 1-in-20 risk level, Columbia needs to increase the deliverability of gas from its Lake Carnico Point of Delivery to Columbia’s central Kentucky markets. This requires Columbia to extend its twelve-inch DE line from the Turner Regulator Station and connect to the twelve-inch Georgetown-Frankfort line. To meet the 1-in-20 risk level for gas supply, Columbia’s new flow from the Lake Carnico Point of Delivery needs to be 71,950 Dth/day or approximately 3,750 mcf/h.

Columbia’s existing DKL, 305 psig, line from the Turner Regulator Station to the Georgetown-Frankfort line is primarily eight-inch pipe. Due to the limited operating pressure and diameter, this section of line limited the amount of gas that could be pushed into the DKT system in Frankfort and Georgetown. Columbia’s hydraulic model, as configured, predicted that the maximum amount of gas that could flow from Lake Carnico was approximately 2,540 mcf/h.

Further hydraulic analysis revealed that with approximately seven miles of twelve-inch pipeline connecting line DE directly to the Georgetown-Frankfort line that the flow out of the Lake Carnico Point of Delivery would max out at about 2,950 mcf/h, using the existing contract pressure of 600 psig at Lake Carnico.

At Columbia’s request, Columbia Gas Transmission Company has increased the 600 psig delivery pressure at the Lake Carnico Point of Delivery to 750 psig. With the higher delivery pressure at the Lake Carnico Point of Delivery, and the seven mile, twelve-inch connection from the DE line to the Georgetown-Frankfort line, the hydraulic model predicts that about 3,750 mcf/h can be supplied into Columbia’s central Kentucky markets from the Lake Carnico Point of Delivery, which will allow Columbia to meet its new 1-in-20 peak day supply criteria.

**ATTACHMENT 5**  
**Permits**

**APPLICATION FOR PIPE OR WIRE OCCUPANCY**  
(Please fill out questions 1-7 and include these pages with your application)

Please answer all questions and return to:  
Norfolk Southern Director Real Estate  
Attn: Pipe, Wire, Cable Ind. Dev. App  
600 West Peachtree Street, Suite 1650  
Atlanta, GA 30308

- 1) Legal Name and Address of Applicant (party to agreement)  
Legal Name\*\*: COLUMBIA GAS OF KENTUCKY, INC.  
Street: 2001 MERLER RD.  
City: LEXINGTON State: KY Zip: 40512

\*\*Please ensure that the exact legal name is provided with no abbreviations. This name, as well as the information below, will be used for agreement preparation.

- 2) Applicant is a (provide state of formation for corporation, limited liability companies and name of owner for sole proprietorship):  
 Corporation -- State: KENTUCKY  
 Partnership (Limited/General) -- State: \_\_\_\_\_  
 Limited Liability Company - State: \_\_\_\_\_  
 Sole Proprietorship -- Name of Owner: \_\_\_\_\_  
 Individual  
 Government Entity  
 Contractor Working Solely for NS (Dept. Name) \_\_\_\_\_  
 Other (Specify): \_\_\_\_\_

- 3) Name and Address of Applicant's Representative:  
Name: DUKE MARSH  
Title: PRESIDENT  
Company: DUKE ENGINEERING CO.  
Street: P.O. BOX 868  
City: MT. STERLING State: KY Zip: 40353  
Telephone: 859-497-4015 Fax: 859-497-0998  
E-Mail Address: dukeeng@direcway.com

- 4) Location of Proposed Facility:  
Nearest City/Municipality: GEORGETOWN County: Scott  
State: KY Closest Street: I-75  
Closest Street Grade Crossing AARDOT #: \_\_\_\_\_  
GPS Coordinates: Latitude 38° 15' 47" Longitude 84° 33' 15"  
Footage (1103' N ) (direction) N/S/E/W from Railway Mile Post No. 66  
or center of public Highway Crossing or Bridge 695' S FROM I-75 BRIDGE  
(Name of Street)

5) Will Facility be Located Entirely Within Confines of a Public Right of Way?

( ) Yes \* (X) No

\* If yes, provide conclusive evidence for verification in the form of a letter or memo from the appropriate Road Authority indicating that proposed installation is acceptable to the Road Authority

Street width: \_\_\_\_\_ Street Right of Way width: \_\_\_\_\_

Road Authority Responsible for Street Maintenance

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Telephone: \_\_\_\_\_

6) Proposed Facility to be Installed is a:

(X) New facility ( ) Upgrade of an existing facility\*

\*If an upgrade, please identify and attach copy of current agreement for the facility.

7) Proposed Installation/Construction Date(s): July / August 2005

If application is approved, applicant agrees to reimburse the Railroad for any cost incurred by the Railroad incident to installation, maintenance, and/or supervision necessitated by this pipeline or wireline installation, and further agrees to assume all liability for accidents or injuries which arise as a result of this installation.

4/20/05  
Date

Gene A. Lytle  
Signature

**Pipeline**  
**(Complete all Applicable Information)**

- a) Type of Proposed Installation:
- i)  Transverse Crossing Only
  - ii)  Longitudinal Occupancy Only
  - iii)  Longitudinal and Transverse Crossing(s)
  - iv)  Pipeline in highway under Railway bridge
  - v)  Pipeline on highway bridge over railroad
  - vi)  Pipeline bridge over Railway
- b) Material to be conveyed: NATURAL GAS
- c) Diameter of carrier pipe: 12"
- d) Diameter of casing pipe: 18"
- e) Proposed method of installation (Check proposed method)
- i)  Bore and jack (See Section 5.1.3 of NSCE-8)
  - ii)  Jacking (See Section 5.1.4 of NSCE-8)
  - iii)  Tunneling (Tunnel Liner Plate) (See Section 5.1.5 of NSCE-8)
  - iv)  Direction Boring/Horiz. Direction Drilling – Method A (See Section 5.1.6 of NSCE-8)
  - v)  Direction Boring/Horiz. Direction Drilling – Method B (See Section 5.1.6 of NSCE-8)
  - vi)  Open Cut (See Section 5.1.2 of NSCE-8)
  - vii)  Other (Specify):  
\_\_\_\_\_  
\_\_\_\_\_

All proposed transverse pipeline crossing applications shall include the following:

- a. Pipe Data Sheet (blank copy attached)
- b. Plan View of Crossing (See NSCE-8 Specification Plate II, below is a suggested check-list for your plan development)
- All Railway tracks, including distance to any turnouts from proposed pipeline
  - Indicates distance (in feet) to Norfolk Southern Mile Post or Grade Crossing
  - Angle of Crossing relative to Railway track(s)
  - Dimensioned Property Lines
  - Location of Valves (if required by NSCE-8)
  - Location of Vents (if required by NSCE-8)
  - Location of Signs (preferably located at edge of Property or Right of Way Lines)
  - N/A Location of Railway pole lines or signal facilities
  - N/A Location of any above or below ground utilities
  - N/A If proposed pipeline is within highway limits, show the location and type of grade crossing traffic control devices (Mast flashers, cantilever flashers, gates, etc.)
  - Casing pipe length
  - Location of launching and receiving pits
- c. Profile View of Crossing (See NSCE-8 Specification Plate III, below is a suggested check-list for your plan development)
- Profile of ground above crossing
  - Distance to Valves (if required by NSCE-8)
  - Distance to Vents and height above ground (if required by NSCE-8)

- Distance to Signs
- All known property lines
- Theoretical Railway embankment lines
- Proposed location and elevations of launching and receiving pits
- Casing pipe length
- Bottom of rail elevation
- Depth of cover between bottom of rail and top of casing pipe (or carrier pipe if casing pipe not required)
- Location of and the minimum depth of cover from ground line to top of casing pipe on right of way (such as ditches)

d.

General Notes

**All plans shall include the following General Notes:**

Contractor shall follow all requirements of Norfolk Southern's NSCE-8 Specifications

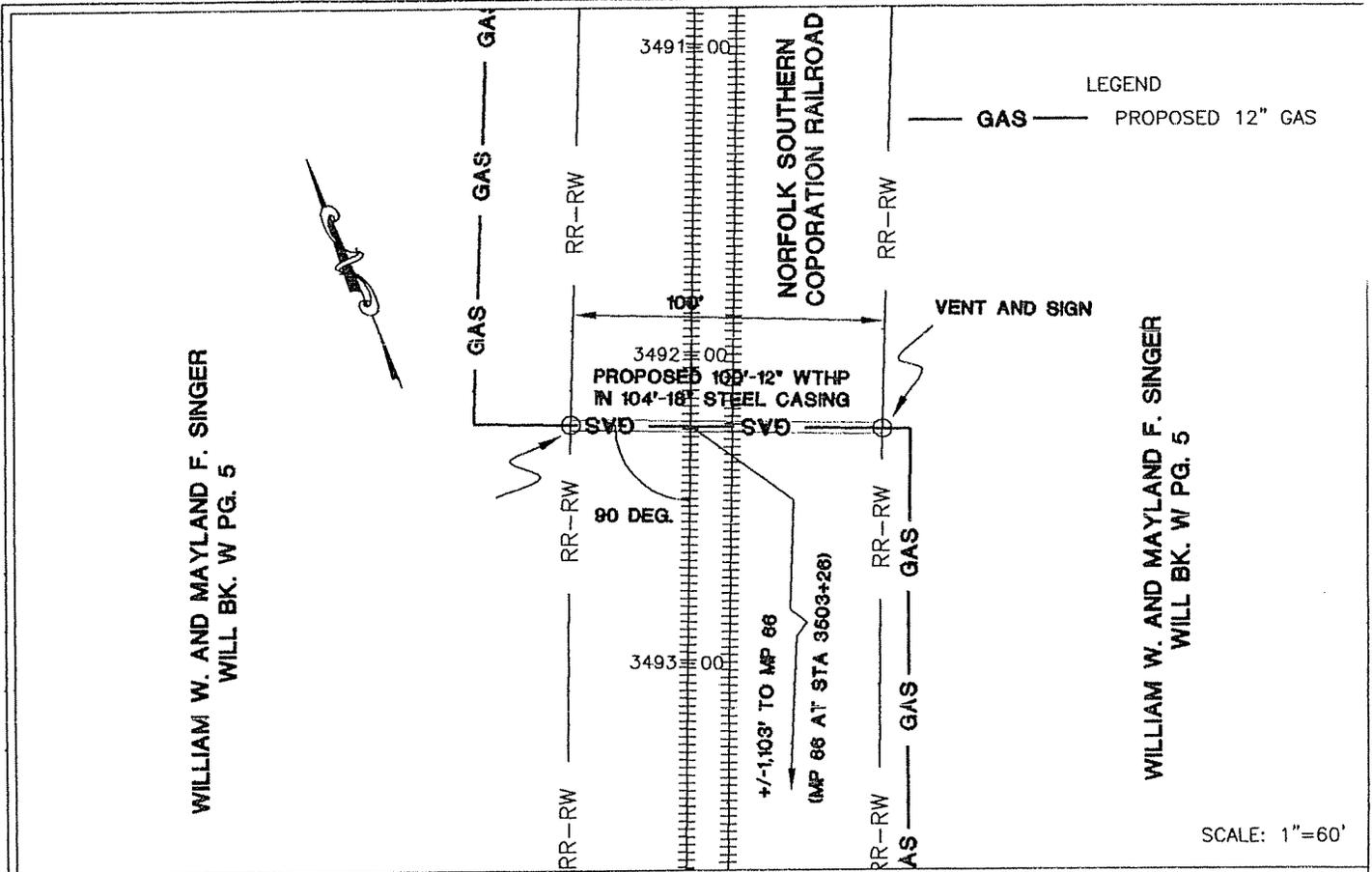
Pipe Line and Crossing to be installed and maintained in accordance with last approved AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION Specifications for Pipelines Conveying Flammable and Non-flammable Substances

**Blasting Not Permitted**

## PIPE DATA SHEET

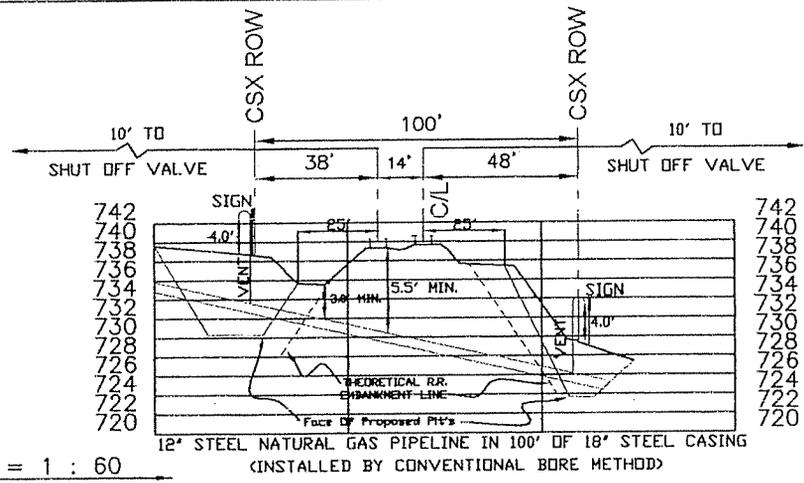
	CARRIER PIPE	CASING PIPE
CONTENTS TO BE HANDLED	NATURAL GAS	CARRIER PIPE
NORMAL OPERATING PRESSURE	700 PSI	—
NOMINAL SIZE OF PIPE	12 IN	18 IN.
OUTSIDE DIAMETER	12.75 IN	18 IN.
INSIDE DIAMETER	12.344 IN	17.376 IN.
WALL THICKNESS	0.203 IN	0.312 IN
WEIGHT PER FOOT	27.2	58.94
MATERIAL	STEEL	STEEL
PROCESS OF MANUFACTURE	ELECTRIC RESISTANCE WELDED	ELECTRIC RESISTANCE WELDED
SPECIFICATION	API 5L/X60	API 5L/X60
GRADE OR CLASS	API 5L/X60	API 5L/X60
TEST PRESSURE	1080 PSI	5 PSI
TYPE OF JOINT	BUTT WELDED	BUTT WELDED
TYPE OF COATING	DOUBLE EPOXY 203 X60 EFB	DOUBLE EPOXY.
DETAILS OF CATHODIC PROTECTION	ANODE (SACRIFICIAL)	NOT PROTECTED.
DETAILS OF SEALS OR PROTECTION AT END OF CASING	LINK SEALS	N/A
METHOD OF INSTALLATION	INSERTION	BORE & JACK
CHARACTER OF SUBSURFACE MATERIAL	3'-5' OF SOIL OVER BED ROCK	3'-5' OF SOIL OVER BED ROCK
APPROXIMATE GROUND WATER LEVEL	UNKNOWN	UNKNOWN.
SOURCE OF INFORMATION ON SUBSURFACE CONDITIONS	VISUAL/PAST EXP.	VISUAL/PAST EXP.

COLUMBIA GAS OF KENTUCKY, INC.  
**PLAN FOR RAILROAD/RAILWAY CROSSING**



STATE OF KENTUCKY  
JEFFERY K. PENDLETON  
351V  
LICENSED PROFESSIONAL LAND SURVEYOR

*4/22/05*  
V = 1 : 20



**12" STEEL NATURAL GAS PIPELINE CROSSING UNDER CSX RAILROAD TRACK  
CROSSING AT APPROXIMATE CSX STA. 3492+23  
(VIEW LOOKING NORTH-DOWN STATION)**

**General Notes:**

Contractor shall follow all requirements of Norfolk Southern's NSCE-8 Specifications.

Pipe Line and Crossing to be installed and maintained in accordance with last approved AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION Specifications for Pipelines Conveying Flammable and Non-flammable Substances.

**Blasting Not Permitted.**

COMPANY				<b>COLUMBIA GAS OF KENTUCKY, INC.</b>			
RAILROAD/RAILWAY				<b>NORFOLK SOUTHERN COPORATION</b>			
MUNICIPALITY		COUNTY		STATE			
GEORGETOWN		SCOTT		KENTUCKY			
ENGINEER		DRAWING BY		F.B.		PG.	
D.MARTIN		D.MARTIN		N/A		N/A	
MAP		DATE		REVISED			
6720212-K		3-31-05					
JOB ORDER				01-0268055-00			
CSXT VAL MAP:				V-1KY/33		DWG NO.	

**APPLICATION FOR PIPE OR WIRE OCCUPANCY**

*(Please fill out questions 1-7 and include these pages with your application)*

Please answer all questions and return to:

Norfolk Southern Director Real Estate  
Attn: Pipe, Wire, Cable Ind. Dev. App  
600 West Peachtree Street, Suite 1650  
Atlanta, GA 30308

1) Legal Name and Address of Applicant (party to agreement)

Legal Name\*\*: COLUMBIA GAS OF KENTUCKY, Inc.  
Street: 2001 MERCER RD.  
City: LEXINGTON State: KY Zip: 40512

**\*\*Please ensure that the exact legal name is provided with no abbreviations. This name, as well as the information below, will be used for agreement preparation.**

2) Applicant is a (provide state of formation for corporation, limited liability companies and name of owner for sole proprietorship):

Corporation – State: Kentucky  
 Partnership (Limited/General) – State: \_\_\_\_\_  
 Limited Liability Company - State: \_\_\_\_\_  
 Sole Proprietorship – Name of Owner: \_\_\_\_\_  
 Individual  
 Government Entity  
 Contractor Working Solely for NS (Dept. Name) \_\_\_\_\_  
 Other (Specify): \_\_\_\_\_

3) Name and Address of Applicant's Representative:

Name: DUKE MARTIN  
Title: PRESIDENT  
Company: DUKE ENGINEERING COMPANY  
Street: P.O. BOX 868  
City: MT. STERLING State: KY Zip: 40353  
Telephone: 859-497-4015 Fax: 859-497-0998  
E-Mail Address: dukeeng@direrway.com

4) Location of Proposed Facility:

Nearest City/Municipality: GEORGETOWN County: SCOTT  
State: KY Closest Street: US 32  
Closest Street Grade Crossing AARDOT #: \_\_\_\_\_  
GPS Coordinates: Latitude 38° 13' 51" Longitude 84° 33' 22"  
Footage (310' N) (direction) N/S/E/W from Railway Mile Post No. 68  
or center of public Highway Crossing or Bridge 2,500' S of US 32  
(Name of Street)

5) Will Facility be Located Entirely Within Confines of a Public Right of Way?

Yes \*  No

\* If yes, provide conclusive evidence for verification (letter or memo) from the appropriate Road Authority indicating acceptance of proposed installation

Street width: \_\_\_\_\_ Street Right of Way width: \_\_\_\_\_

Road Authority Responsible for Street Maintenance

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Telephone: \_\_\_\_\_

6) Facility to be Installed is a:

New facility  Upgrade of an existing facility\*

\*If an upgrade, please identify and attach copy of current agreement for the facility.

7) Proposed Installation/Construction Date(s): July / August 2005

If application is approved, applicant agrees to reimburse Railway for any cost incurred by Railway incident to installation, maintenance, and/or supervision necessitated by this pipeline or wire line installation, and further agrees to assume all liability for accidents or injuries which arise as a result of this installation.

4/20/05  
Date

James A. Lipton  
Signature

## Pipeline (Complete all Applicable Information)

- a) Type of Proposed Installation:
- i)  Transverse Crossing Only
  - ii)  Longitudinal Occupancy Only
  - iii)  Longitudinal and Transverse Crossing(s)
  - iv)  Pipeline in highway under Railway bridge
  - v)  Pipeline on highway bridge over railroad
  - vi)  Pipeline bridge over Railway
- b) Material to be conveyed: NATURAL GAS
- c) Diameter of carrier pipe: 12"
- d) Diameter of casing pipe: 18"
- e) Proposed method of installation (Check proposed method)
- i)  Bore and jack (See Section 5.1.3 of NSCE-8)
  - ii)  Jacking (See Section 5.1.4 of NSCE-8)
  - iii)  Tunneling (Tunnel Liner Plate) (See Section 5.1.5 of NSCE-8)
  - iv)  Direction Boring/Horiz. Direction Drilling – Method A (See Section 5.1.6 of NSCE-8)
  - v)  Direction Boring/Horiz. Direction Drilling – Method B (See Section 5.1.6 of NSCE-8)
  - vi)  Open Cut (See Section 5.1.2 of NSCE-8)
  - vii)  Other (Specify):  
\_\_\_\_\_

All proposed transverse pipeline crossing applications shall include the following:

- a. Pipe Data Sheet (blank copy attached)
- b. Plan View of Crossing (See NSCE-8 Specification Plate II, below is a suggested check-list for your plan development)
- All Railway tracks, including distance to any turnouts from proposed pipeline
  - Indicates distance (in feet) to Norfolk Southern Mile Post or Grade Crossing
  - Angle of Crossing relative to Railway track(s)
  - Dimensioned Property Lines
  - Location of Valves (if required by NSCE-8)
  - Location of Vents (if required by NSCE-8)
  - Location of Signs (preferably located at edge of Property or Right of Way Lines)
  - N/A Location of Railway pole lines or signal facilities
  - N/A Location of any above or below ground utilities
  - N/A If proposed pipeline is within highway limits, show the location and type of grade crossing traffic control devices (Mast flashers, cantilever flashers, gates, etc.)
  - Casing pipe length
  - Location of launching and receiving pits
- c. Profile View of Crossing (See NSCE-8 Specification Plate III, below is a suggested check-list for your plan development)
- Profile of ground above crossing
  - Distance to Valves (if required by NSCE-8)
  - Distance to Vents and height above ground (if required by NSCE-8)

- Distance to Signs**
- All known property lines**
- Theoretical Railway embankment lines**
- Proposed location and elevations of launching and receiving pits**
- Casing pipe length**
- Bottom of rail elevation**
- Depth of cover between bottom of rail and top of casing pipe (or carrier pipe if casing pipe not required)**
- Location of and the minimum depth of cover from ground line to top of casing pipe on right of way (such as ditches)**

d. **General Notes**

**All plans shall include the following General Notes:**

**Contractor shall follow all requirements of Norfolk Southern's NSCE-8 Specifications**

**Pipe Line and Crossing to be installed and maintained in accordance with last approved AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION Specifications for Pipelines Conveying Flammable and Non-flammable Substances**

**Blasting Not Permitted**

## PIPE DATA SHEET

	CARRIER PIPE	CASING PIPE
CONTENTS TO BE HANDLED	NATURAL GAS	CARRIER PIPE
NORMAL OPERATING PRESSURE	700 PSIG	—
NOMINAL SIZE OF PIPE	12 IN	18 IN
OUTSIDE DIAMETER	12.75 IN	18 IN.
INSIDE DIAMETER	12.344 IN	17.376 IN.
WALL THICKNESS	0.203 IN	0.312 IN
WEIGHT PER FOOT	27.2	58.94
MATERIAL	STEEL	STEEL
PROCESS OF MANUFACTURE	ELECTRIC RESISTANCE WELDED	ELECTRIC RESISTANCE WELDED
SPECIFICATION	API 5L/X60	API 5L/X60
GRADE OR CLASS	API 5L/X60	API 5L/X60
TEST PRESSURE	1080 PSIG	5 PSIG
TYPE OF JOINT	BUTT WELDED	BUTT WELDED
TYPE OF COATING	DOUBLE EPOXY .203 X60 EFB	DOUBLE EPOXY
DETAILS OF CATHODIC PROTECTION	ANODE (SACRIFICIAL)	NOT PROTECTED
DETAILS OF SEALS OR PROTECTION AT END OF CASING	LINK SEALS	N/A
METHOD OF INSTALLATION	INSERTION	BOREHOLE JACK
CHARACTER OF SUBSURFACE MATERIAL	3'-5' OF SOIL OVER BED ROCK	3'-5' OF SOIL OVER BED ROCK
APPROXIMATE GROUND WATER LEVEL	UNKNOWN	UNKNOWN.
SOURCE OF INFORMATION ON SUBSURFACE CONDITIONS	VISUAL/PAST EXP	VISUAL/PAST EXP.

Duke Engineering Company  
P.O. Box 868  
Mt. Sterling, Kentucky 40353

April 22, 2005

**DMJM+HARRIS**

Attention: NS Pipe and Wire Administrator  
260 South Broad Street  
Suite 1500  
Philadelphia, PA 19102

***Re: Columbia Gas of Kentucky, Two (2) Proposed Gasline Crossing  
Permits Located Outside of Georgetown, KY.***

Dear Sir or Madame:

Please find attached for your review, two (2) separate proposed 12" gasline crossing permits. The proposed **Columbia Gas of Kentucky 12"** gasline would cross the existing Norfolk Southern railroad near Georgetown, KY at two (2) separate locations. Along with the proposed plans, two (2) application fees of \$1,830.00, are also attached.

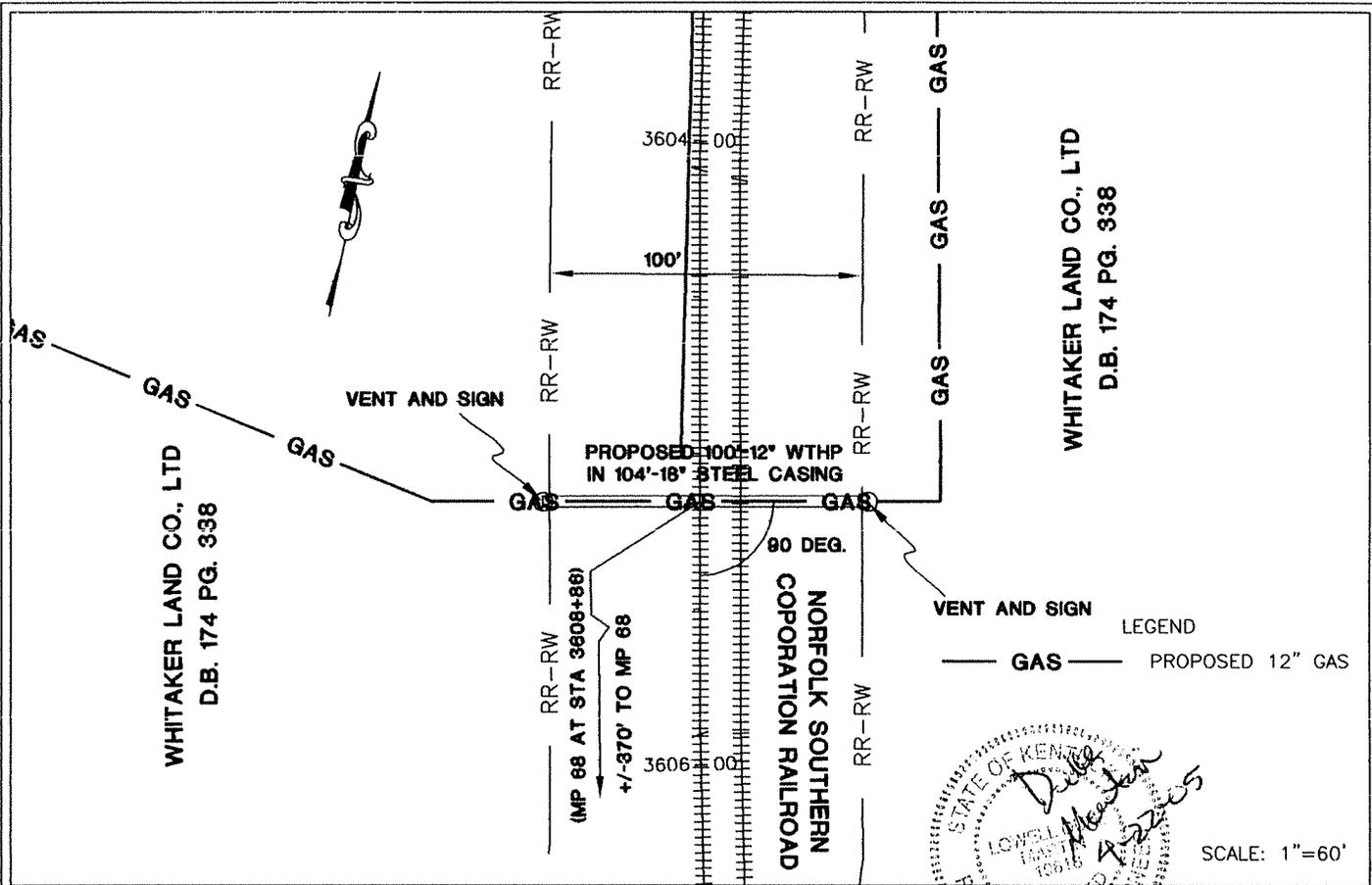
If you have any questions or need any additional information please give me a call. (859)-497-4015.

Duke Engineering Company

*Duke Martin*

Duke Martin

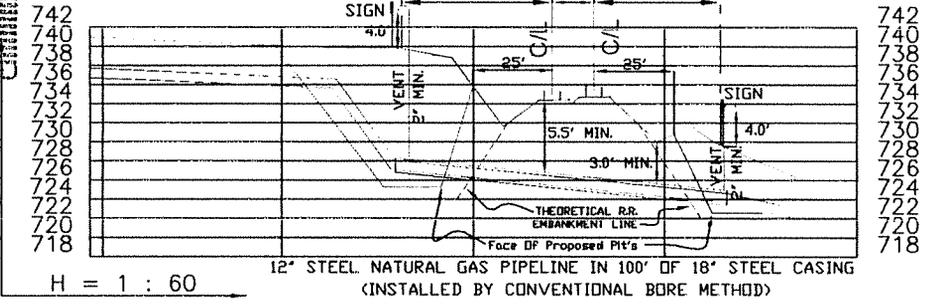
COLUMBIA GAS OF KENTUCKY, INC.  
**PLAN FOR RAILROAD/RAILWAY CROSSING**



STATE OF KENTUCKY  
JEFFERY K. PENDLETON  
3517  
LICENSED PROFESSIONAL LAND SURVEYOR

*Handwritten:* 4/22/05

V = 1 : 20



12" STEEL NATURAL GAS PIPELINE CROSSING UNDER CSX RAILROAD TRACK  
CROSSING AT APPROXIMATE NSC STA. 3605+16  
(VIEW LOOKING NORTH-DOWN STATION)

**General Notes:**

Contractor shall follow all requirements of Norfolk Southern's NSCE-8 Specifications.

Pipe Line and Crossing to be installed and maintained in accordance with last approved AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION Specifications for Pipelines Conveying Flammable and Non-flammable Substances.

**Blasting Not Permitted.**

COMPANY				<b>COLUMBIA GAS OF KENTUCKY, INC.</b>			
RAILROAD/RAILWAY				<b>NORFOLK SOUTHERN COPORATION</b>			
MUNICIPALITY		COUNTY		STATE			
GEORGETOWN		SCOTT		KENTUCKY			
ENGINEER	DRAWING BY		F.B.	PG.			
D.MARTIN	D.MARTIN		N/A	N/A			
MAP	DATE		REVISED				
6720212-K	3-31-05						
JOB ORDER				01-0268055-00			
CSXT VAL MAP:				DWC NO			
V-1KY/34							

**ATTACHMENT 3**  
**Description of Proposed Route and Construction**

**Columbia Gas of Kentucky, Inc.**  
**DE Line Extension**

**Description of Location, Route and Construction**

General

Columbia Gas of Kentucky, Inc. (“Columbia”) seeks authorization from the Public Service Commission of Kentucky to construct a twelve-inch steel pipeline, approximately seven miles in length, from its Turner Regulator Station north of Georgetown, Kentucky to its Georgetown-Frankfort line west of Georgetown, Kentucky.

Route

The project begins at a tie-in located at the existing Columbia Turner Regulator Station located near the intersection of Delaplain Rd. and Interstate 75 with a twelve-inch steel pipeline. The route goes southwest approximately 6,400 feet to an open area where a directional drill will be set up to bore under Interstate 75 to the west. Once on the west side of Interstate 75, the route then goes south paralleling the Norfolk Southern railroad track on the west side, then crossing to the east side for approximately 11,800 feet. The route then crosses the railroad track to the west and goes west approximately 4,000 feet crossing Dry Creek and State Route 25 to the west. It then parallels State Route 25 on the west side to the south for approximately 4,500 feet to the northern edge of the Cardome Academy property. From there the route goes west on the Cardome Academy property approximately 1,500 feet, then south approximately 800 feet. It then goes west approximately 1,200 feet to an overhead electrical easement. From there the route continues south in the overhead easement for approximately 3,400 feet where the Elkhorn Creek directional drill will begin. The length of this drill will be approximately 700 feet and will exit on the north side of State Route 460 near State Route 62. The route will continue west paralleling State Route 460 on the north side for approximately 1,400 feet, then crossing State Route 460 to the south and paralleling State Route 62 for approximately 4,300 feet. The route then ties into an existing twelve-inch steel pipeline at the intersection of State Route 62 and State Route 460B. The length of the DE Extension project is approximately 38,500 feet of twelve-inch steel pipeline. Approximately 32,300 feet of the project will be in private easements. The line is a distribution pipeline designed as a Class 3 location transmission line throughout the proposed route.

Construction Start Date

It is Columbia’s desire to obtain Commission approval for the Application for a Certificate of Public Convenience and Necessity and to complete eminent domain proceedings

for outstanding rights of way so that it may begin construction of the pipeline on June 20, 2005.

### Pipeline Specifications

The proposed twelve-inch pipeline will meet the following engineering specifications:

- Twelve-inch nominal pipe size (12.75 inch O.D.) made from carbon steel
- a wall thickness of .203 inches
- a fusion bond epoxy coating of 13-15 mills thickness for open trenching
- a dual fusion bond coating of 30 mills minimum thickness for boring purposes
- a Specified Minimum Yield Strength 60,000 psi, 1911 psig @ 100% SYMS

### Pipeline Operating Conditions

Design pressure and MAOP of 720 psig, resulting in stress levels of 37.7% of SYMS.  
Test pressure of 1080 psig.

720 psig Design Pressure	37.7% SMYS
1080 psig Hydrostatic Test Pressure	

### Specific Construction Details

#### (1) Welding

Welding of the joints of pipe will be conducted in conformance with the Federal Department of Transportation (“DOT”) Regulations, 49 C.F.R. Part 192, Sub-Part E, entitled Welding of Steel in Pipelines and 807 KAR 5:022, Section 5, entitled Welding of Steel in Pipelines.

The pipe joints will be welded together and placed either along the side of the trench or in the excavation After each weld is completed, a qualified inspector will visually inspect it. Radiographic inspection of the welds will be performed in accordance with 49 C.F.R. Part 192 and 807 KAR 5:022.

(2) Pipe Coating and Cathodic Protection

All pipe will be protected with an external coating prior to its placement in the trench. An electronic holiday detector will be passed over the sections of pipe as they are coated at the mill to check for faults in the coating. Any faults (holidays) that are detected will be repaired before the coated line is accepted for delivery.

The welded joints will be field coated and wrapped to provide coating protection equal to the protection afforded the other portions of the pipe. The coated joints, as well as the lengths, will be checked with the holiday detector and all faults will be repaired prior to placing the line in service.

The line will be installed with insulated fittings at the tie-in points and cathodically protected with high potential magnesium anodes that will be distributed along the pipeline to minimize deterioration from corrosion.

(3) Hydrostatic Testing

The in-place testing of the completed pipeline will be done in accordance with 49 C.F.R. 192 and 807 KAR 5:022. Such testing will entail the pipeline being filled with water and held at a minimum of 150% of its 720 psig future MAOP throughout the required test period. Water discharged after testing will be released in accordance with all of the requirements imposed by governmental agencies and therefore will be done in a manner that will prevent erosion, contamination or ecological damage to the area. If necessary, test water will be sampled and filtered prior to disposal.

(4) Roads and Highway Crossings

The majority of the project will be open trenched with approximately 1,500 feet of it being directional drilled. The proposed areas to be directional drilled are: Interstate 75, Dry Creek, State Route 25, Elkhorn Creek and State Route 460. These activities will be conducted in a manner whereby the disruption of service is minimized.

(5) Stream Crossings

The crossing of Cane Run Creek and any small runs will be done by the open cut method. The crossing of the Dry Run Creek will be by directional bore. Actual construction conditions will dictate the method of construction used to cross Elkhorn Creek, and the method of crossing the Elkhorn Creek likely be left to the contractor. Columbia will construct these crossings pursuant to the conditions set forth in its Army Corps of Engineers Nationwide Permit.

(6) Drainage Tile Field Crossings

Any drain tile that is damaged, cut, or removed by pipeline construction activity will be replaced or repaired to the landowner's satisfaction. Preplanning with the affected property owners should minimize drain tile damage.

(7) Operating and Maintenance Policy

The proposed pipeline shall be operated and maintained in accordance with the applicable provisions of 49 C.F.R. Part 192 and 807 KAR 5:022.

(8) Safety During Construction and Operation

The pipeline shall be constructed and operated in accordance with the aforementioned paragraphs and under the supervision and inspection of qualified personnel.

(9) Valves, Blowdowns and Smart Pigging

Isolation valves will be installed at each end of the pipeline and at a location near the center of the pipeline, with blowdown valves located on each side of the isolation valve. The pipeline is designed to allow for future DOT smart pigging requirements.

**ATTACHMENT 4**  
**Engineering Analysis**

## Engineering Analysis

In order for Columbia Gas of Kentucky, Inc. (“Columbia”) to obtain the incremental gas supply needed to satisfy the 1-in-20 risk level, Columbia needs to increase the deliverability of gas from its Lake Carnico Point of Delivery to Columbia’s central Kentucky markets. This requires Columbia to extend its twelve-inch DE line from the Turner Regulator Station and connect to the twelve-inch Georgetown-Frankfort line. To meet the 1-in-20 risk level for gas supply, Columbia’s new flow from the Lake Carnico Point of Delivery needs to be 71,950 Dth/day or approximately 3,750 mcf/h.

Columbia’s existing DKL, 305 psig, line from the Turner Regulator Station to the Georgetown-Frankfort line is primarily eight-inch pipe. Due to the limited operating pressure and diameter, this section of line limited the amount of gas that could be pushed into the DKT system in Frankfort and Georgetown. Columbia’s hydraulic model, as configured, predicted that the maximum amount of gas that could flow from Lake Carnico was approximately 2,540 mcf/h.

Further hydraulic analysis revealed that with approximately seven miles of twelve-inch pipeline connecting line DE directly to the Georgetown-Frankfort line that the flow out of the Lake Carnico Point of Delivery would max out at about 2,950 mcf/h, using the existing contract pressure of 600 psig at Lake Carnico.

At Columbia’s request, Columbia Gas Transmission Company has increased the 600 psig delivery pressure at the Lake Carnico Point of Delivery to 750 psig. With the higher delivery pressure at the Lake Carnico Point of Delivery, and the seven mile, twelve-inch connection from the DE line to the Georgetown-Frankfort line, the hydraulic model predicts that about 3,750 mcf/h can be supplied into Columbia’s central Kentucky markets from the Lake Carnico Point of Delivery, which will allow Columbia to meet its new 1-in-20 peak day supply criteria.

**ATTACHMENT 5**  
**Permits**

**APPLICATION FOR PIPE OR WIRE OCCUPANCY**  
(Please fill out questions 1-7 and include these pages with your application)

Please answer all questions and return to:  
Norfolk Southern Director Real Estate  
Attn: Pipe, Wire, Cable Ind. Dev. App  
600 West Peachtree Street, Suite 1650  
Atlanta, GA 30308

- 1) Legal Name and Address of Applicant (party to agreement)  
Legal Name\*\*: COLUMBIA GAS OF KENTUCKY, INC.  
Street: 2001 MERLER RD.  
City: LEXINGTON State: KY Zip: 40542

\*\*Please ensure that the exact legal name is provided with no abbreviations. This name, as well as the information below, will be used for agreement preparation.

- 2) Applicant is a (provide state of formation for corporation, limited liability companies and name of owner for sole proprietorship):  
 Corporation -- State: KENTUCKY  
 Partnership (Limited/General) -- State: \_\_\_\_\_  
 Limited Liability Company - State: \_\_\_\_\_  
 Sole Proprietorship -- Name of Owner: \_\_\_\_\_  
 Individual  
 Government Entity  
 Contractor Working Solely for NS (Dept. Name) \_\_\_\_\_  
 Other (Specify): \_\_\_\_\_

- 3) Name and Address of Applicant's Representative:  
Name: DUKE MARSH  
Title: PRESIDENT  
Company: DUKE ENGINEERING CO.  
Street: P.O. BOX 868  
City: MT. STERLING State: KY Zip: 40353  
Telephone: 859-497-4015 Fax: 859-497-0998  
E-Mail Address: dukeeng@direcway.com

- 4) Location of Proposed Facility:  
Nearest City/Municipality: GEORGETOWN County: Scott  
State: KY Closest Street: I-75  
Closest Street Grade Crossing AARDOT #: \_\_\_\_\_  
GPS Coordinates: Latitude 38° 15' 47" Longitude 84° 33' 15"  
Footage (1103' N ) (direction) N/S/E/W from Railway Mile Post No. 66  
or center of public Highway Crossing or Bridge 695' S FROM I-75 BRIDGE  
(Name of Street)

5) Will Facility be Located Entirely Within Confines of a Public Right of Way?

( ) Yes \* (X) No

\* If yes, provide conclusive evidence for verification in the form of a letter or memo from the appropriate Road Authority indicating that proposed installation is acceptable to the Road Authority

Street width: \_\_\_\_\_ Street Right of Way width: \_\_\_\_\_

Road Authority Responsible for Street Maintenance

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Telephone: \_\_\_\_\_

6) Proposed Facility to be Installed is a:

(X) New facility ( ) Upgrade of an existing facility\*

\*If an upgrade, please identify and attach copy of current agreement for the facility.

7) Proposed Installation/Construction Date(s): July / August 2005

If application is approved, applicant agrees to reimburse the Railroad for any cost incurred by the Railroad incident to installation, maintenance, and/or supervision necessitated by this pipeline or wireline installation, and further agrees to assume all liability for accidents or injuries which arise as a result of this installation.

4/20/05  
Date

Gene A. Lytle  
Signature

**Pipeline**  
**(Complete all Applicable Information)**

- a) Type of Proposed Installation:
- i)  Transverse Crossing Only
  - ii)  Longitudinal Occupancy Only
  - iii)  Longitudinal and Transverse Crossing(s)
  - iv)  Pipeline in highway under Railway bridge
  - v)  Pipeline on highway bridge over railroad
  - vi)  Pipeline bridge over Railway
- b) Material to be conveyed: NATURAL GAS
- c) Diameter of carrier pipe: 12"
- d) Diameter of casing pipe: 18"
- e) Proposed method of installation (Check proposed method)
- i)  Bore and jack (See Section 5.1.3 of NSCE-8)
  - ii)  Jacking (See Section 5.1.4 of NSCE-8)
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  - iv)  Direction Boring/Horiz. Direction Drilling – Method A (See Section 5.1.6 of NSCE-8)
  - v)  Direction Boring/Horiz. Direction Drilling – Method B (See Section 5.1.6 of NSCE-8)
  - vi)  Open Cut (See Section 5.1.2 of NSCE-8)
  - vii)  Other (Specify):  
\_\_\_\_\_  
\_\_\_\_\_

All proposed transverse pipeline crossing applications shall include the following:

- a. Pipe Data Sheet (blank copy attached)
- b. Plan View of Crossing (See NSCE-8 Specification Plate II, below is a suggested check-list for your plan development)
- All Railway tracks, including distance to any turnouts from proposed pipeline
  - Indicates distance (in feet) to Norfolk Southern Mile Post or Grade Crossing
  - Angle of Crossing relative to Railway track(s)
  - Dimensioned Property Lines
  - Location of Valves (if required by NSCE-8)
  - Location of Vents (if required by NSCE-8)
  - Location of Signs (preferably located at edge of Property or Right of Way Lines)
  - N/A Location of Railway pole lines or signal facilities
  - N/A Location of any above or below ground utilities
  - N/A If proposed pipeline is within highway limits, show the location and type of grade crossing traffic control devices (Mast flashers, cantilever flashers, gates, etc.)
  - Casing pipe length
  - Location of launching and receiving pits
- c. Profile View of Crossing (See NSCE-8 Specification Plate III, below is a suggested check-list for your plan development)
- Profile of ground above crossing
  - Distance to Valves (if required by NSCE-8)
  - Distance to Vents and height above ground (if required by NSCE-8)

- Distance to Signs
- All known property lines
- Theoretical Railway embankment lines
- Proposed location and elevations of launching and receiving pits
- Casing pipe length
- Bottom of rail elevation
- Depth of cover between bottom of rail and top of casing pipe (or carrier pipe if casing pipe not required)
- Location of and the minimum depth of cover from ground line to top of casing pipe on right of way (such as ditches)

d.

General Notes

**All plans shall include the following General Notes:**

Contractor shall follow all requirements of Norfolk Southern's NSCE-8 Specifications

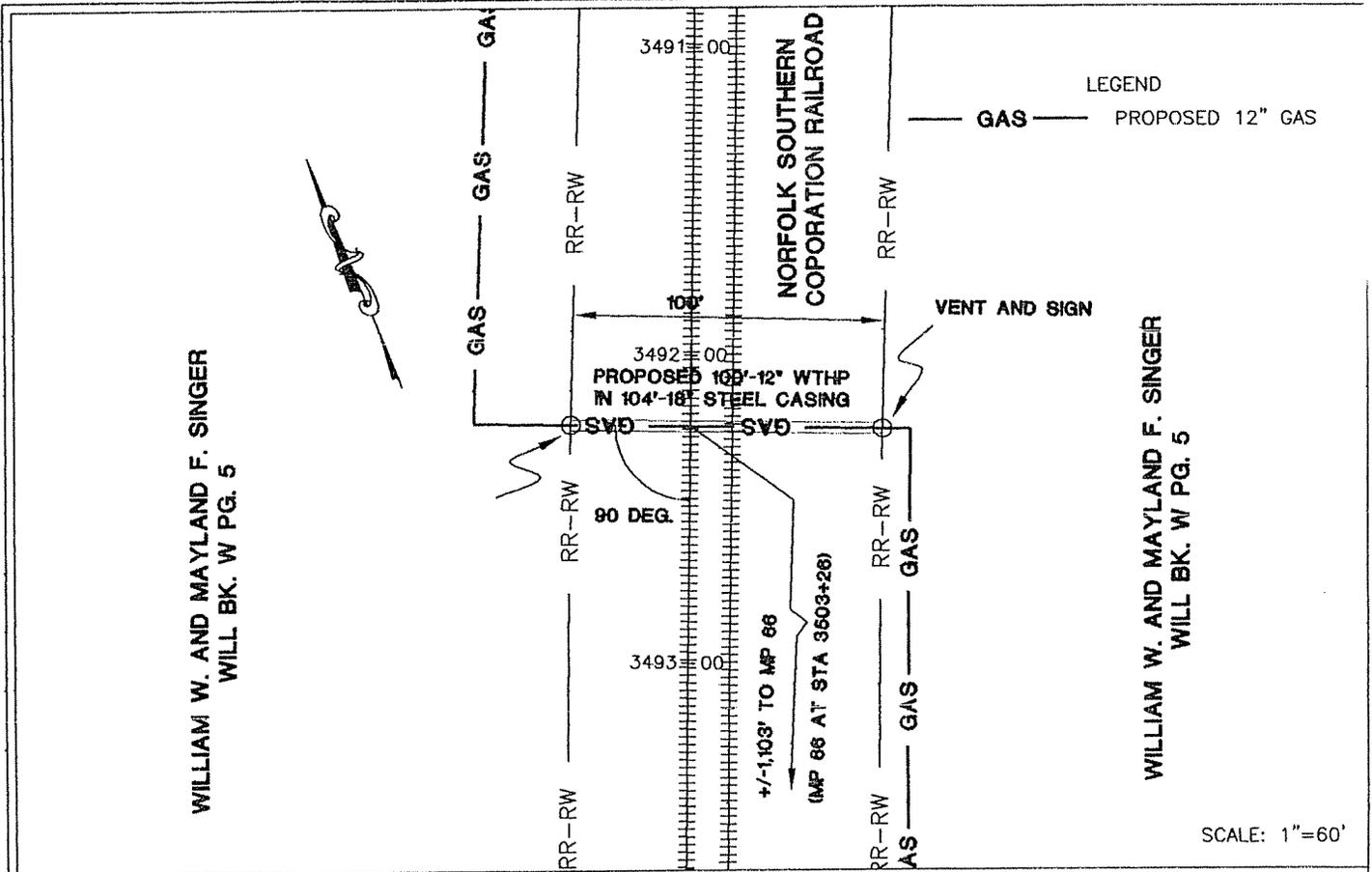
Pipe Line and Crossing to be installed and maintained in accordance with last approved AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION Specifications for Pipelines Conveying Flammable and Non-flammable Substances

**Blasting Not Permitted**

## PIPE DATA SHEET

	CARRIER PIPE	CASING PIPE
CONTENTS TO BE HANDLED	NATURAL GAS	CARRIER PIPE
NORMAL OPERATING PRESSURE	700 PSI	—
NOMINAL SIZE OF PIPE	12 IN	18 IN.
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WEIGHT PER FOOT	27.2	58.94
MATERIAL	STEEL	STEEL
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SPECIFICATION	API 5L/X60	API 5L/X60
GRADE OR CLASS	API 5L/X60	API 5L/X60
TEST PRESSURE	1080 PSI	5 PSI
TYPE OF JOINT	BUTT WELDED	BUTT WELDED
TYPE OF COATING	DOUBLE EPOXY .203 X60 EFB	DOUBLE EPOXY.
DETAILS OF CATHODIC PROTECTION	ANODE (SACRIFICIAL)	NOT PROTECTED.
DETAILS OF SEALS OR PROTECTION AT END OF CASING	LINK SEALS	N/A
METHOD OF INSTALLATION	INSERTION	BORE & JACK
CHARACTER OF SUBSURFACE MATERIAL	3'-5' OF SOIL OVER BED ROCK	3'-5' OF SOIL OVER BED ROCK
APPROXIMATE GROUND WATER LEVEL	UNKNOWN	UNKNOWN.
SOURCE OF INFORMATION ON SUBSURFACE CONDITIONS	VISUAL/PAST EXP.	VISUAL/PAST EXP.

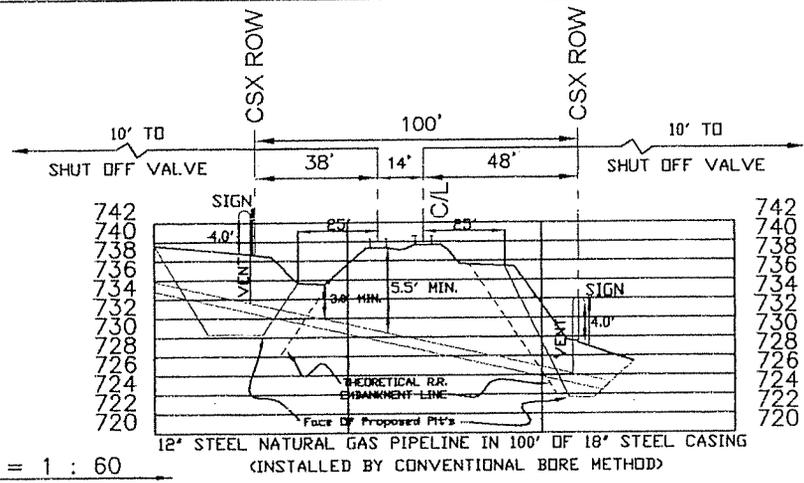
COLUMBIA GAS OF KENTUCKY, INC.  
**PLAN FOR RAILROAD/RAILWAY CROSSING**



SCALE: 1"=60'

STATE OF KENTUCKY  
JEFFERY K. PENDLETON  
351V  
LICENSED PROFESSIONAL LAND SURVEYOR

*4/22/05*  
V = 1 : 20



*Duke Martin*  
STATE OF KENTUCKY  
LOWELL DUKE MARTIN  
19618  
LICENSED PROFESSIONAL ENGINEER  
*4-22-05*

**12" STEEL NATURAL GAS PIPELINE CROSSING UNDER CSX RAILROAD TRACK  
CROSSING AT APPROXIMATE CSX STA. 3492+23  
(VIEW LOOKING NORTH-DOWN STATION)**

**General Notes:**

Contractor shall follow all requirements of Norfolk Southern's NSCE-8 Specifications.

Pipe Line and Crossing to be installed and maintained in accordance with last approved AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION Specifications for Pipelines Conveying Flammable and Non-flammable Substances.

Blasting Not Permitted.

COMPANY				<b>COLUMBIA GAS OF KENTUCKY, INC.</b>			
RAILROAD/RAILWAY				<b>NORFOLK SOUTHERN COPORATION</b>			
MUNICIPALITY		COUNTY		STATE			
GEORGETOWN		SCOTT		KENTUCKY			
ENGINEER		DRAWING BY		F.B.		PG.	
D.MARTIN		D.MARTIN		N/A		N/A	
MAP		DATE		REVISED			
6720212-K		3-31-05					
JOB ORDER				01-0268055-00			
CSXT VAL MAP:				V-1KY/33		DWG NO.	

**APPLICATION FOR PIPE OR WIRE OCCUPANCY**

*(Please fill out questions 1-7 and include these pages with your application)*

Please answer all questions and return to:

Norfolk Southern Director Real Estate  
Attn: Pipe, Wire, Cable Ind. Dev. App  
600 West Peachtree Street, Suite 1650  
Atlanta, GA 30308

1) Legal Name and Address of Applicant (party to agreement)

Legal Name\*\*: COLUMBIA GAS OF KENTUCKY, Inc.  
Street: 2001 MERCER RD.  
City: LEXINGTON State: KY Zip: 40512

**\*\*Please ensure that the exact legal name is provided with no abbreviations. This name, as well as the information below, will be used for agreement preparation.**

2) Applicant is a (provide state of formation for corporation, limited liability companies and name of owner for sole proprietorship):

Corporation – State: Kentucky  
 Partnership (Limited/General) – State: \_\_\_\_\_  
 Limited Liability Company - State: \_\_\_\_\_  
 Sole Proprietorship – Name of Owner: \_\_\_\_\_  
 Individual  
 Government Entity  
 Contractor Working Solely for NS (Dept. Name) \_\_\_\_\_  
 Other (Specify): \_\_\_\_\_

3) Name and Address of Applicant's Representative:

Name: DUKE MARTIN  
Title: PRESIDENT  
Company: DUKE ENGINEERING COMPANY  
Street: P.O. BOX 868  
City: MT. STERLING State: KY Zip: 40353  
Telephone: 859-497-4015 Fax: 859-497-0998  
E-Mail Address: dukeeng@direrway.com

4) Location of Proposed Facility:

Nearest City/Municipality: GEORGETOWN County: SCOTT  
State: KY Closest Street: US 32  
Closest Street Grade Crossing AARDOT #: \_\_\_\_\_  
GPS Coordinates: Latitude 38° 13' 51" Longitude 84° 33' 22"  
Footage (310' N) (direction) N/S/E/W from Railway Mile Post No. 68  
or center of public Highway Crossing or Bridge 2,500' S of US 32  
(Name of Street)

5) Will Facility be Located Entirely Within Confines of a Public Right of Way?

Yes \*  No

\* If yes, provide conclusive evidence for verification (letter or memo) from the appropriate Road Authority indicating acceptance of proposed installation

Street width: \_\_\_\_\_ Street Right of Way width: \_\_\_\_\_

Road Authority Responsible for Street Maintenance

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Contact: \_\_\_\_\_

Telephone: \_\_\_\_\_

6) Facility to be Installed is a:

New facility  Upgrade of an existing facility\*

\*If an upgrade, please identify and attach copy of current agreement for the facility.

7) Proposed Installation/Construction Date(s): July / August 2005

If application is approved, applicant agrees to reimburse Railway for any cost incurred by Railway incident to installation, maintenance, and/or supervision necessitated by this pipeline or wire line installation, and further agrees to assume all liability for accidents or injuries which arise as a result of this installation.

4/20/05  
Date

James A. Lipton  
Signature

## Pipeline (Complete all Applicable Information)

- a) Type of Proposed Installation:
- i)  Transverse Crossing Only
  - ii)  Longitudinal Occupancy Only
  - iii)  Longitudinal and Transverse Crossing(s)
  - iv)  Pipeline in highway under Railway bridge
  - v)  Pipeline on highway bridge over railroad
  - vi)  Pipeline bridge over Railway
- b) Material to be conveyed: NATURAL GAS
- c) Diameter of carrier pipe: 12"
- d) Diameter of casing pipe: 18"
- e) Proposed method of installation (Check proposed method)
- i)  Bore and jack (See Section 5.1.3 of NSCE-8)
  - ii)  Jacking (See Section 5.1.4 of NSCE-8)
  - iii)  Tunneling (Tunnel Liner Plate) (See Section 5.1.5 of NSCE-8)
  - iv)  Direction Boring/Horiz. Direction Drilling – Method A (See Section 5.1.6 of NSCE-8)
  - v)  Direction Boring/Horiz. Direction Drilling – Method B (See Section 5.1.6 of NSCE-8)
  - vi)  Open Cut (See Section 5.1.2 of NSCE-8)
  - vii)  Other (Specify):  
\_\_\_\_\_

All proposed transverse pipeline crossing applications shall include the following:

- a. Pipe Data Sheet (blank copy attached)
- b. Plan View of Crossing (See NSCE-8 Specification Plate II, below is a suggested check-list for your plan development)
- All Railway tracks, including distance to any turnouts from proposed pipeline
  - Indicates distance (in feet) to Norfolk Southern Mile Post or Grade Crossing
  - Angle of Crossing relative to Railway track(s)
  - Dimensioned Property Lines
  - Location of Valves (if required by NSCE-8)
  - Location of Vents (if required by NSCE-8)
  - Location of Signs (preferably located at edge of Property or Right of Way Lines)
  - N/A Location of Railway pole lines or signal facilities
  - N/A Location of any above or below ground utilities
  - N/A If proposed pipeline is within highway limits, show the location and type of grade crossing traffic control devices (Mast flashers, cantilever flashers, gates, etc.)
  - Casing pipe length
  - Location of launching and receiving pits
- c. Profile View of Crossing (See NSCE-8 Specification Plate III, below is a suggested check-list for your plan development)
- Profile of ground above crossing
  - Distance to Valves (if required by NSCE-8)
  - Distance to Vents and height above ground (if required by NSCE-8)

- Distance to Signs**
- All known property lines**
- Theoretical Railway embankment lines**
- Proposed location and elevations of launching and receiving pits**
- Casing pipe length**
- Bottom of rail elevation**
- Depth of cover between bottom of rail and top of casing pipe (or carrier pipe if casing pipe not required)**
- Location of and the minimum depth of cover from ground line to top of casing pipe on right of way (such as ditches)**

d. **General Notes**

**All plans shall include the following General Notes:**

**Contractor shall follow all requirements of Norfolk Southern's NSCE-8 Specifications**

**Pipe Line and Crossing to be installed and maintained in accordance with last approved AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION Specifications for Pipelines Conveying Flammable and Non-flammable Substances**

**Blasting Not Permitted**

## PIPE DATA SHEET

	CARRIER PIPE	CASING PIPE
CONTENTS TO BE HANDLED	NATURAL GAS	CARRIER PIPE
NORMAL OPERATING PRESSURE	700 PSIG	—
NOMINAL SIZE OF PIPE	12 IN	18 IN
OUTSIDE DIAMETER	12.75 IN	18 IN.
INSIDE DIAMETER	12.344 IN	17.376 IN.
WALL THICKNESS	0.203 IN	0.312 IN
WEIGHT PER FOOT	27.2	58.94
MATERIAL	STEEL	STEEL
PROCESS OF MANUFACTURE	ELECTRIC RESISTANCE WELDED	ELECTRIC RESISTANCE WELDED
SPECIFICATION	API 5L/X60	API 5L/X60
GRADE OR CLASS	API 5L/X60	API 5L/X60
TEST PRESSURE	1080 PSIG	5 PSIG
TYPE OF JOINT	BUTT WELDED	BUTT WELDED
TYPE OF COATING	DOUBLE EPOXY .203 X60 EFB	DOUBLE EPOXY
DETAILS OF CATHODIC PROTECTION	ANODE (SACRIFICIAL)	NOT PROTECTED
DETAILS OF SEALS OR PROTECTION AT END OF CASING	LINK SEALS	N/A
METHOD OF INSTALLATION	INSERTION	BOREHOLE JACK
CHARACTER OF SUBSURFACE MATERIAL	3'-5' OF SOIL OVER BED ROCK	3'-5' OF SOIL OVER BED ROCK
APPROXIMATE GROUND WATER LEVEL	UNKNOWN	UNKNOWN.
SOURCE OF INFORMATION ON SUBSURFACE CONDITIONS	VISUAL/PAST EXP	VISUAL/PAST EXP.

Duke Engineering Company  
P.O. Box 868  
Mt. Sterling, Kentucky 40353

April 22, 2005

**DMJM+HARRIS**

Attention: NS Pipe and Wire Administrator  
260 South Broad Street  
Suite 1500  
Philadelphia, PA 19102

***Re: Columbia Gas of Kentucky, Two (2) Proposed Gasline Crossing  
Permits Located Outside of Georgetown, KY.***

Dear Sir or Madame:

Please find attached for your review, two (2) separate proposed 12" gasline crossing permits. The proposed **Columbia Gas of Kentucky 12"** gasline would cross the existing Norfolk Southern railroad near Georgetown, KY at two (2) separate locations. Along with the proposed plans, two (2) application fees of \$1,830.00, are also attached.

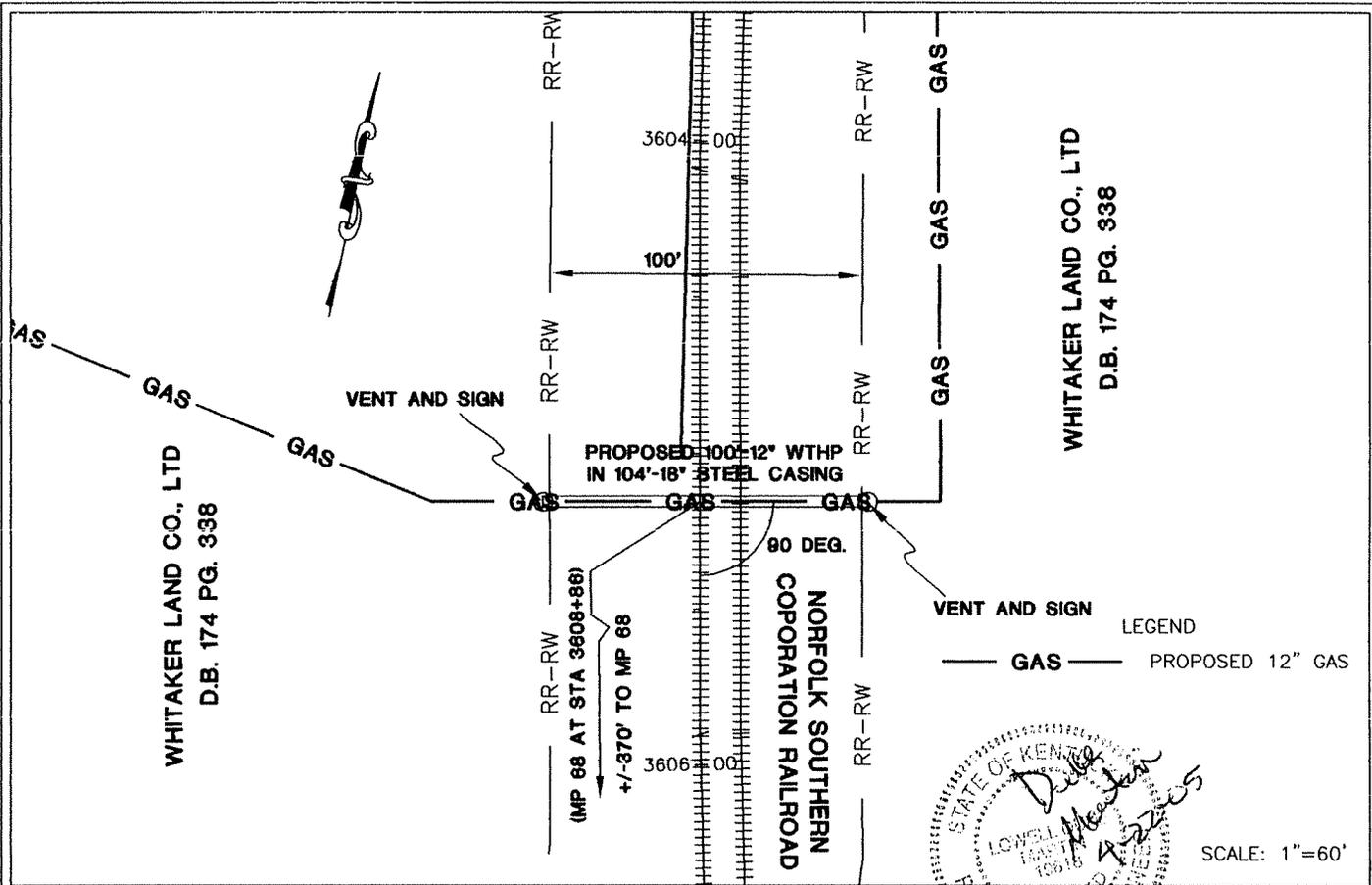
If you have any questions or need any additional information please give me a call. (859)-497-4015.

Duke Engineering Company

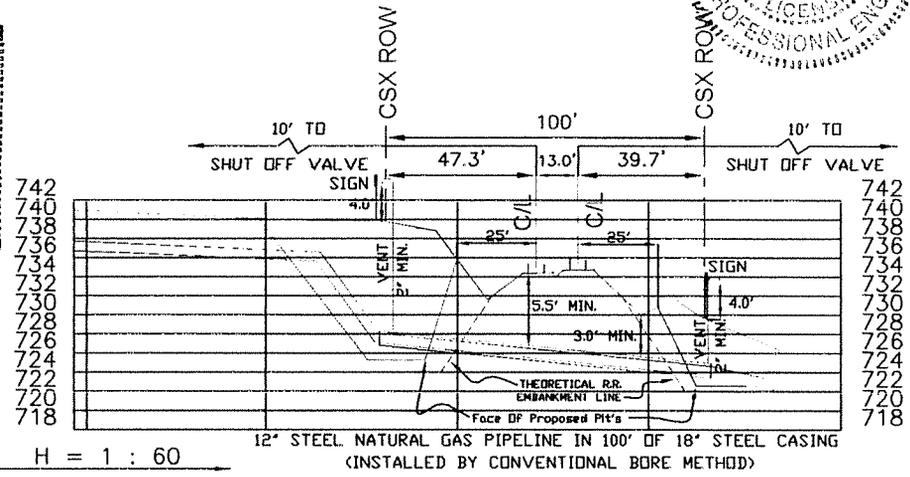
*Duke Martin*

Duke Martin

COLUMBIA GAS OF KENTUCKY, INC.  
**PLAN FOR RAILROAD/RAILWAY CROSSING**



STATE OF KENTUCKY  
JEFFERY K. PENDLETON  
3517  
LICENSED PROFESSIONAL LAND SURVEYOR  
4/22/05



**12" STEEL NATURAL GAS PIPELINE CROSSING UNDER CSX RAILROAD TRACK**  
CROSSING AT APPROXIMATE NSC STA. 3605+16  
(VIEW LOOKING NORTH-DOWN STATION)

**General Notes:**

Contractor shall follow all requirements of Norfolk Southern's NSCE-8 Specifications.

Pipe Line and Crossing to be installed and maintained in accordance with last approved AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION Specifications for Pipelines Conveying Flammable and Non-flammable Substances.

**Blasting Not Permitted.**

COMPANY				<b>COLUMBIA GAS OF KENTUCKY, INC.</b>			
RAILROAD/RAILWAY				<b>NORFOLK SOUTHERN COPORATION</b>			
MUNICIPALITY		COUNTY		STATE			
GEORGETOWN		SCOTT		KENTUCKY			
ENGINEER	DRAWING BY		F.B.	PG.			
D.MARTIN	D.MARTIN		N/A	N/A			
MAP		DATE		REVISED			
6720212-K		3-31-05					
JOB ORDER				01-0268055-00			
CSXT VAL MAP:				DWC NO			
V-1KY/34							

KENTUCKY TRANSPORTATION CABINET  
 Department of Highways  
 Permits Branch

TC 99-1E  
 Rev. 10/01

Released Date \_\_\_\_\_

**ENCROACHMENT PERMIT**

PERMIT NO. \_\_\_\_\_

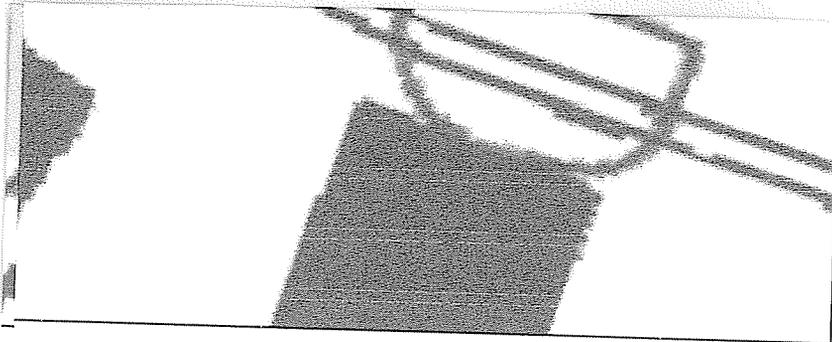
<p><b>APPLICANT IDENTIFICATION:</b>                  NAME: <u>Columbia Gas Of Kentucky, Inc.</u>                  CONTACT PERSON: <u>Mark McCullough</u>                  ADDRESS: <u>2001 Mercer Road</u>                  CITY: <u>Lexington</u>                  STATE: <u>Kentucky</u> ZIP CODE: <u>40512</u>                  PHONE: area code ( <u>859</u> ) <u>288-0248</u></p>	<p><b>PROJECT IDENTIFICATION:</b>                  ACCESS CONTROL: <input checked="" type="checkbox"/> By Permit <input type="checkbox"/> Partial <input type="checkbox"/> Full                  COUNTY: <u>Scott</u> PRIORITY ROUTE NO: <u>I-75</u>                  MILEPOINT: <u>129.199 +/-</u> <input type="checkbox"/> Left <input type="checkbox"/> Right <input checked="" type="checkbox"/> X-ing                  PROJECT STATUS: <input type="checkbox"/> Maint. <input checked="" type="checkbox"/> Const. <input type="checkbox"/> Design                  PROJECT # STATE: _____                  PROJECT # FEDERAL: _____                  ROAD/STREET NAME: <u>I-75</u></p>
<p><b>TYPE OF ENCROACHMENT:</b>  <input type="checkbox"/> COMMERCIAL ENTRANCE - BUSINESS _____  <input type="checkbox"/> PRIVATE ENTRANCE: <input type="checkbox"/> Single Family <input type="checkbox"/> Farm  <input checked="" type="checkbox"/> UTILITY: <input type="checkbox"/> Overhead <input checked="" type="checkbox"/> Underground  <input type="checkbox"/> GRADE: <input type="checkbox"/> Fill <input type="checkbox"/> Landscape on R/W  <input type="checkbox"/> AIRSPACE: <input type="checkbox"/> Agreement <input type="checkbox"/> Lease  <input type="checkbox"/> OTHER: (Specify) _____</p>	<p><b>ATTACHMENTS:</b>  <input type="checkbox"/> Standard Drawings (List on TC 99-21 under Misc.)  <input checked="" type="checkbox"/> Applicant's Plans  <input type="checkbox"/> Highway Plan and Profile Sheets  <input type="checkbox"/> TC 99-3 (Ponding Encroachment Specs. and Conditions)  <input type="checkbox"/> TC 99-4 (Rest Area Usage Specs. and Conditions)  <input type="checkbox"/> TC 99-5 (Tree Cutting/Trimming Specs. and Conditions)  <input type="checkbox"/> TC 99-6 (Chemical Use of Specs. and Conditions)  <input checked="" type="checkbox"/> TC 99-10 (Typical Highway Boring Crossing Detail)  <input type="checkbox"/> TC 99-12 (Overhead Utility Encroachment Diagram)  <input checked="" type="checkbox"/> TC 99-13 (Surface Restoration Methods)  <input type="checkbox"/> TC 99-21 (Encroachment Permit General Notes and Specs.)  <input type="checkbox"/> TC 99-22 (Agreement for Services to be Performed)  <input type="checkbox"/> TC 99-23 (Mass Transit Shelter Specs. and Conditions)  <input type="checkbox"/> Other Attachments (Specify): _____</p>
<p><b>TYPE OF INDEMNITY:</b> <input checked="" type="checkbox"/> Bond <input type="checkbox"/> Cash  <input checked="" type="checkbox"/> SELF-INSURED AMOUNT ENCUMBERED \$ _____  <input type="checkbox"/> OTHER _____</p>	
<p><b>NAME AND ADDRESS OF LOCAL INSURANCE AGENCY OR SELF-INSURED REPRESENTATIVE:</b>                  _____</p>	
<p><b>INDEMNITY:</b> The applicant, in order to secure this obligation, has deposited with the Transportation Cabinet as a guarantee of conformance with the Department's Encroachment Permit requirements, an indemnity in the amount of \$ <u>\$500,000.00</u> as determined by the Department. It shall be the responsibility of the applicant or permittee, his heirs and assignees to keep all indemnities in full force until construction or reconstruction has been completed and duly accepted by an authorized agent of the Transportation Cabinet, Department of Highways.</p>	
<p><b>BRIEF DESCRIPTION OF WORK TO BE DONE.</b>                  Columbia Gas Of Ky. has attached plans proposing to install 300 feet of 12 inch steel gas line on State ROW crossing Interstate 75 at Station 240+61, approximately 3,000 feet south of the I-75/Delaplain Road intersection. the proposed gas main will be installed by boring and with casing across I-75. (see attached plans)</p>	
<p><b>IMPORTANT (PLEASE READ):</b> Applicant <input type="checkbox"/> does <input checked="" type="checkbox"/> does not intend to apply for excess R/W.</p>	

When the work is completed in accordance with the terms of this encroachment permit, your indemnity will be released. However, the permit is effective until revoked by the Transportation Cabinet and the terms on the permit accompanying permit documents and drawings remain in effect as long as the encroachment exists. **FUTURE MAINTENANCE OF THE ENCROACHMENT IS THE RESPONSIBILITY OF THE PERMITEE.** It is important that you understand the requirements of this encroachment permit application and accompanying documents. If you have not done so, it is suggested that you review these documents and place the permit package in a safe place for future reference.

A copy of this permit and all documents shall be given to your contractor and shall be readily available at the work site for the encroachment permit inspector to review at all times. Failure to meet this requirement may result in cancellation of this permit.

IN THE EVENT THIS APPLICATION IS APPROVED, THIS DOCUMENT SHALL CONSTITUTE A PERMIT FOR THE APPLICANT TO USE THE RIGHT-OF-WAY, BUT ONLY IN THE MANNER AUTHORIZED BY THIS DOCUMENT AND REGULATIONS OF THE DEPARTMENT AND THE DRAWINGS, PLANS, ATTACHMENTS, AND OTHER PERTINENT DATA ATTACHED HERETO AND MADE A PART HEREOF.



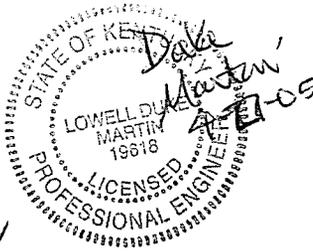


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PLAN SHOWING THE LOCATION OF  
PROPOSED NATURAL GAS PIPELINE  
FACILITIES IN CONJUNCTION WITH:  
DE LINE EXTENSION PROJECT  
(PROPOSED I-75 CROSSING)

GEORGTOWN	ENGINEER: DUKE MARTIN
	TECHNICIAN: DUKE MARTIN
SCOTT	CHECKED BY:
	FIELD BOOK/PAGE No.:
CH 2005	PS&I JOB ORDER NO.:
No.1 OF 1	DRAWING No.

KENTUCKY TRANSPORTATION CABINET  
Department of Highways  
Permits Branch

TC 99-1E  
Rev. 10/01

Released Date \_\_\_\_\_

**ENCROACHMENT PERMIT**

PERMIT NO. \_\_\_\_\_

<p><b>APPLICANT IDENTIFICATION:</b>  NAME: <u>Columbia Gas Of Kentucky, Inc.</u>  CONTACT PERSON: <u>Mark McCullough</u>  ADDRESS: <u>2001 Mercer Road</u>  CITY: <u>Lexington</u>  STATE: <u>Kentucky</u> ZIP CODE: <u>40512</u>  PHONE: area code (<u>859</u>) <u>288-0248</u></p>	<p><b>PROJECT IDENTIFICATION:</b>  ACCESS CONTROL: <input checked="" type="checkbox"/> By Permit    <input type="checkbox"/> Partial    <input type="checkbox"/> Full  COUNTY: <u>Scott</u> PRIORITY ROUTE NO: <u>US 460</u>  MILEPOINT: <u>8.583 +/-</u>    <input type="checkbox"/> Left    <input type="checkbox"/> Right    <input checked="" type="checkbox"/> X-ing  PROJECT STATUS:    <input type="checkbox"/> Maint.    <input checked="" type="checkbox"/> Const.    <input type="checkbox"/> Design  PROJECT # STATE: _____  PROJECT # FEDERAL: _____  ROAD/STREET NAME: <u>US 460</u></p>
<p><b>TYPE OF ENCROACHMENT:</b>  <input type="checkbox"/> COMMERCIAL ENTRANCE - BUSINESS _____  <input type="checkbox"/> PRIVATE ENTRANCE:    <input type="checkbox"/> Single Family    <input type="checkbox"/> Farm  <input checked="" type="checkbox"/> UTILITY:                    <input type="checkbox"/> Overhead            <input checked="" type="checkbox"/> Underground  <input type="checkbox"/> GRADE:                    <input type="checkbox"/> Fill                    <input type="checkbox"/> Landscape on R/W  <input type="checkbox"/> AIRSPACE:                <input type="checkbox"/> Agreement        <input type="checkbox"/> Lease  <input type="checkbox"/> OTHER: (Specify) _____</p>	<p><b>ATTACHMENTS:</b>  <input type="checkbox"/> Standard Drawings (List on TC 99-21 under Misc.)  <input checked="" type="checkbox"/> Applicant's Plans  <input type="checkbox"/> Highway Plan and Profile Sheets  <input type="checkbox"/> TC 99-3 (Ponding Encroachment Specs. and Conditions)  <input type="checkbox"/> TC 99-4 (Rest Area Usage Specs. and Conditions)  <input type="checkbox"/> TC 99-5 (Tree Cutting/Trimming Specs. and Conditions)  <input type="checkbox"/> TC 99-6 (Chemical Use of Specs. and Conditions)  <input checked="" type="checkbox"/> TC 99-10 (Typical Highway Boring Crossing Detail)  <input type="checkbox"/> TC 99-12 (Overhead Utility Encroachment Diagram)  <input checked="" type="checkbox"/> TC 99-13 (Surface Restoration Methods)  <input type="checkbox"/> TC 99-21 (Encroachment Permit General Notes and Specs.)  <input type="checkbox"/> TC 99-22 (Agreement for Services to be Performed)  <input type="checkbox"/> TC 99-23 (Mass Transit Shelter Specs. and Conditions)  <input type="checkbox"/> Other Attachments (Specify): _____</p>
<p><b>TYPE OF INDEMNITY:</b>    <input checked="" type="checkbox"/> Bond                    <input type="checkbox"/> Cash  <input checked="" type="checkbox"/> SELF-INSURED AMOUNT ENCUMBERED \$ _____  <input type="checkbox"/> OTHER _____</p>	
<p><b>NAME AND ADDRESS OF LOCAL INSURANCE AGENCY OR SELF-INSURED REPRESENTATIVE:</b>    </p>	
<p><b>INDEMNITY:</b> The applicant, in order to secure this obligation, has deposited with the Transportation Cabinet as a guarantee of conformance with the Department's Encroachment Permit requirements, an indemnity in the amount of \$ <u>\$500,000.00</u> as determined by the Department. It shall be the responsibility of the applicant or permittee, his heirs and assignees to keep all indemnities in full force until construction or reconstruction has been completed and duly accepted by an authorized agent of the Transportation Cabinet, Department of Highways.</p>	
<p><b>BRIEF DESCRIPTION OF WORK TO BE DONE.</b>  Columbia Gas Of Ky. has attached plans proposing to install 1,620 feet of 12 inch steel gas main on State ROW crossing and adjacent to US 460. Beginning at the intersection of US 460 and US 62, near Georgetown, Ky. Approximately seventy feet (70) will be installed by boring (with casing) under US 460, and the remaining 1550 feet will be open cut in grass ROW and in ditch, (see attached plans)</p>	
<p><b>IMPORTANT (PLEASE READ):</b>    Applicant    <input type="checkbox"/> does    <input checked="" type="checkbox"/> does not    intend to apply for excess R/W.</p>	

When the work is completed in accordance with the terms of this encroachment permit, your indemnity will be released. However, the permit is effective until revoked by the Transportation Cabinet and the terms on the permit accompanying permit documents and drawings remain in effect as long as the encroachment exists. **FUTURE MAINTENANCE OF THE ENCROACHMENT IS THE RESPONSIBILITY OF THE PERMITEE.** It is important that you understand the requirements of this encroachment permit application and accompanying documents. If you have not done so, it is suggested that you review these documents and place the permit package in a safe place for future reference.

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STATE OF KENTUCKY  
JEFFERY K.  
PENDLETON  
3517  
LICENSED  
PROFESSIONAL  
LAND SURVEYOR

STATE OF KENTUCKY  
DUKE  
LOWELL DUKE  
MARTIN  
19818  
LICENSED  
PROFESSIONAL  
ENGINEER

4/22/05

PLAN SHOWING THE LOCATION OF  
PROPOSED NATURAL GAS PIPELINE  
FACILITIES IN CONJUNCTION WITH:  
DE LINE EXTENSION PROJECT  
(PORTION IN US 460 PUBLIC RIGHT-OF-WAY)

CITY/TOWN: GEORGTOWN	ENGINEER: DUKE MARTIN
TOWNSHIP:	TECHNICIAN: DUKE MARTIN
COUNTY: SCOTT	CHECKED BY:
MAPS:	FIELD BOOK/PAGE No.:
DATE: MARCH 2005	PS&I JOB ORDER NO.:
SHEET No.1 OF 1	DRAWING No.

KENTUCKY TRANSPORTATION CABINET  
 Department of Highways  
 Permits Branch

TC 99-1E  
 Rev. 10/01

Released Date \_\_\_\_\_

**ENCROACHMENT PERMIT**

PERMIT NO. \_\_\_\_\_

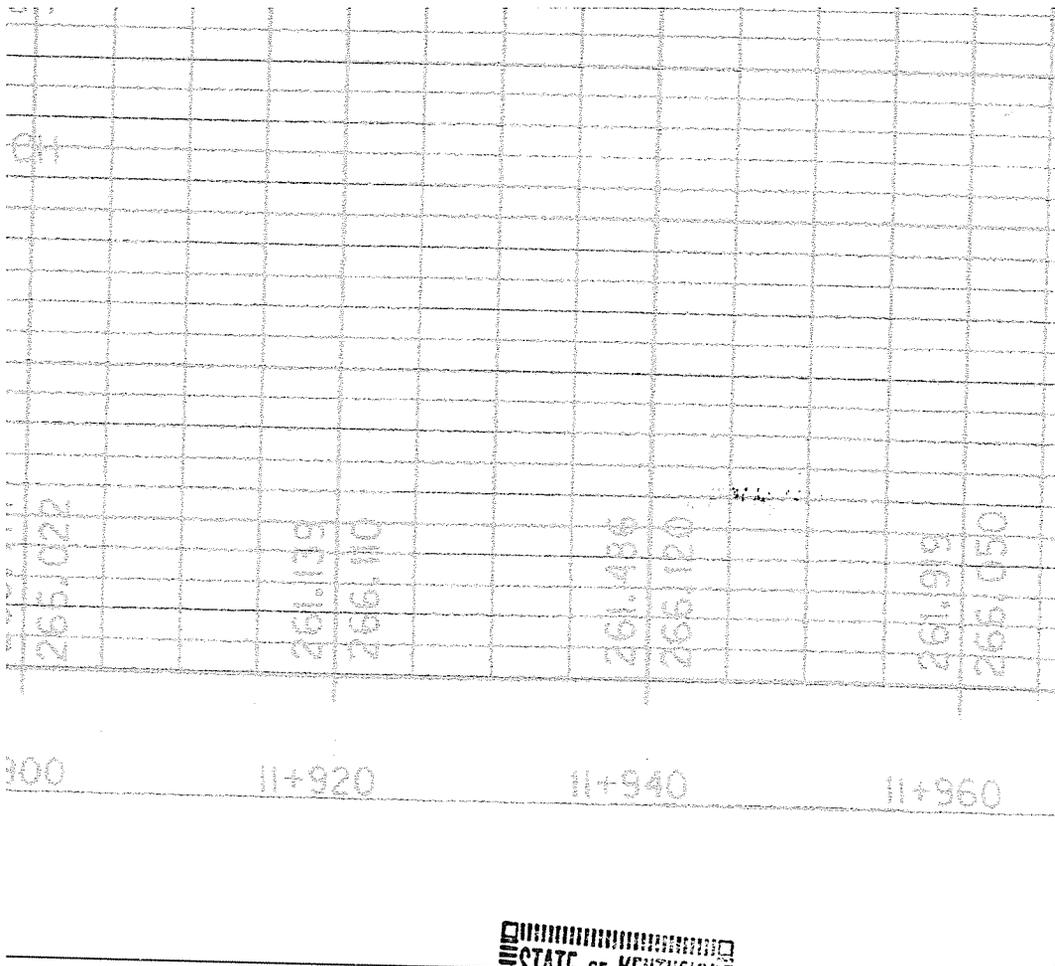
<p><b>APPLICANT IDENTIFICATION:</b>                  NAME: <u>Columbia Gas Of Kentucky, Inc.</u>                  CONTACT PERSON: <u>Mark McCullough</u>                  ADDRESS: <u>2001 Mercer Road</u>                  CITY: <u>Lexington</u>                  STATE: <u>Kentucky</u> ZIP CODE: <u>40512</u>                  PHONE: area code (<u>859</u>) <u>288-0248</u></p>	<p><b>PROJECT IDENTIFICATION:</b>                  ACCESS CONTROL: <input checked="" type="checkbox"/> By Permit <input type="checkbox"/> Partial <input type="checkbox"/> Full                  COUNTY: <u>Scott</u> PRIORITY ROUTE NO: <u>KY 32</u>                  MILEPOINT: <u>1.675 +/-</u> <input type="checkbox"/> Left <input type="checkbox"/> Right <input checked="" type="checkbox"/> X-ing                  PROJECT STATUS: <input type="checkbox"/> Maint. <input checked="" type="checkbox"/> Const. <input type="checkbox"/> Design                  PROJECT # STATE: _____                  PROJECT # FEDERAL: _____                  ROAD/STREET NAME: <u>North Connector</u></p>
<p><b>TYPE OF ENCROACHMENT:</b>  <input type="checkbox"/> COMMERCIAL ENTRANCE - BUSINESS _____  <input type="checkbox"/> PRIVATE ENTRANCE: <input type="checkbox"/> Single Family <input type="checkbox"/> Farm  <input checked="" type="checkbox"/> UTILITY: <input type="checkbox"/> Overhead <input checked="" type="checkbox"/> Underground  <input type="checkbox"/> GRADE: <input type="checkbox"/> Fill <input type="checkbox"/> Landscape on R/W  <input type="checkbox"/> AIRSPACE: <input type="checkbox"/> Agreement <input type="checkbox"/> Lease  <input type="checkbox"/> OTHER: (Specify) _____</p>	<p><b>ATTACHMENTS:</b>  <input type="checkbox"/> Standard Drawings (List on TC 99-21 under Misc.)  <input checked="" type="checkbox"/> Applicant's Plans  <input type="checkbox"/> Highway Plan and Profile Sheets  <input type="checkbox"/> TC 99-3 (Ponding Encroachment Specs. and Conditions)  <input type="checkbox"/> TC 99-4 (Rest Area Usage Specs. and Conditions)  <input type="checkbox"/> TC 99-5 (Tree Cutting/Trimming Specs. and Conditions)  <input type="checkbox"/> TC 99-6 (Chemical Use of Specs. and Conditions)  <input type="checkbox"/> TC 99-10 (Typical Highway Boring Crossing Detail)  <input type="checkbox"/> TC 99-12 (Overhead Utility Encroachment Diagram)  <input type="checkbox"/> TC 99-13 (Surface Restoration Methods)  <input type="checkbox"/> TC 99-21 (Encroachment Permit General Notes and Specs.)  <input type="checkbox"/> TC 99-22 (Agreement for Services to be Performed)  <input type="checkbox"/> TC 99-23 (Mass Transit Shelter Specs. and Conditions)  <input checked="" type="checkbox"/> Other Attachments (Specify): _____</p>
<p><b>TYPE OF INDEMNITY:</b> <input checked="" type="checkbox"/> Bond <input type="checkbox"/> Cash  <input checked="" type="checkbox"/> SELF-INSURED AMOUNT ENCUMBERED \$ _____  <input type="checkbox"/> OTHER _____</p>	
<p><b>NAME AND ADDRESS OF LOCAL INSURANCE AGENCY OR SELF-INSURED REPRESENTATIVE:</b>                  _____</p>	
<p><b>INDEMNITY:</b> The applicant, in order to secure this obligation, has deposited with the Transportation Cabinet as a guarantee of conformance with the Department's Encroachment Permit requirements, an indemnity in the amount of \$ <u>\$500,000.00</u> as determined by the Department. It shall be the responsibility of the applicant or permittee, his heirs and assignees to keep all indemnities in full force until construction or reconstruction has been completed and duly accepted by an authorized agent of the Transportation Cabinet, Department of Highways.</p>	
<p><b>BRIEF DESCRIPTION OF WORK TO BE DONE.</b>                  Columbia Gas Of Ky. has attached plans proposing to install 150 feet of 12" steel gas main and 150 feet of 18" casing under bridge crossing Norfolk-Southern Railroad on North Connector (KY32) in Georgetown(Scott County). This crossing will be on State ROW under the bridge. See attached plans.</p>	
<p><b>IMPORTANT (PLEASE READ):</b> Applicant <input type="checkbox"/> does <input checked="" type="checkbox"/> does not intend to apply for excess R/W.</p>	

When the work is completed in accordance with the terms of this encroachment permit, your indemnity will be released. However, the permit is effective until revoked by the Transportation Cabinet and the terms on the permit accompanying permit documents and drawings remain in effect as long as the encroachment exists. **FUTURE MAINTENANCE OF THE ENCROACHMENT IS THE RESPONSIBILITY OF THE PERMITEE.** It is important that you understand the requirements of this encroachment permit application and accompanying documents. If you have not done so, it is suggested that you review these documents and place the permit package in a safe place for future reference.

A copy of this permit and all documents shall be given to your contractor and shall be readily available at the work site for the encroachment permit inspector to review at all times. Failure to meet this requirement may result in cancellation of this permit.

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STATE OF KENTUCKY  
 JEFFERY K. PENDLETON  
 3517  
 LICENSED PROFESSIONAL LAND SURVEYOR  
 4/22/05

STATE OF KENTUCKY  
 LOWELL DUKE MARTIN  
 19618  
 LICENSED PROFESSIONAL ENGINEER  
 Duke Martin  
 4-21-05

PLAN SHOWING THE LOCATION OF  
 PROPOSED NATURAL GAS PIPELINE  
 FACILITIES IN CONJUNCTION WITH:  
 DE LINE EXTENSION PROJECT  
 NORTH CONNECTOR BRIDGE CROSSING

MN: GEORGTOWN P: SCOTT	ENGINEER: DUKE MARTIN TECHNICIAN: DUKE MARTIN CHECKED BY: FIELD BOOK/PAGE No.: PS&I JOB ORDER NO.:
ARCH 2005 No.1 OF 1	DRAWING No.

KENTUCKY TRANSPORTATION CABINET  
 Department of Highways  
 Permits Branch

TC 99-1E  
 Rev. 10/01

**ENCROACHMENT PERMIT**

PERMIT NO. \_\_\_\_\_

Released Date \_\_\_\_\_

<p><b>APPLICANT IDENTIFICATION:</b>                  NAME: <u>Columbia Gas Of Kentucky, Inc.</u>                  CONTACT PERSON: <u>Mark McCullough</u>                  ADDRESS: <u>2001 Mercer Road</u>                  CITY: <u>Lexington</u>                  STATE: <u>Kentucky</u> ZIP CODE: <u>40512</u>                  PHONE: area code ( <u>859</u> ) <u>288-0248</u></p>	<p><b>PROJECT IDENTIFICATION:</b>                  ACCESS CONTROL: <input checked="" type="checkbox"/> By Permit <input type="checkbox"/> Partial <input type="checkbox"/> Full                  COUNTY: <u>Scott</u> PRIORITY ROUTE NO: <u>US 25</u>                  MILEPOINT: <u>5.542 +/-</u> <input type="checkbox"/> Left <input type="checkbox"/> Right <input checked="" type="checkbox"/> X-ing                  PROJECT STATUS: <input type="checkbox"/> Maint. <input checked="" type="checkbox"/> Const. <input type="checkbox"/> Design                  PROJECT # STATE: _____                  PROJECT # FEDERAL: _____                  ROAD/STREET NAME: <u>US 25</u></p>
--	---

**TYPE OF ENCROACHMENT:**

COMMERCIAL ENTRANCE - BUSINESS \_\_\_\_\_

PRIVATE ENTRANCE:  Single Family  Farm

UTILITY:  Overhead  Underground

GRADE:  Fill  Landscape on R/W

AIRSPACE:  Agreement  Lease

OTHER: (Specify) \_\_\_\_\_

**ATTACHMENTS:**

Standard Drawings (List on TC 99-21 under Misc.)

Applicant's Plans

Highway Plan and Profile Sheets

TC 99-3 (Ponding Encroachment Specs. and Conditions)

TC 99-4 (Rest Area Usage Specs. and Conditions)

TC 99-5 (Tree Cutting/Trimming Specs. and Conditions)

TC 99-6 (Chemical Use of Specs. and Conditions)

TC 99-10 (Typical Highway Boring Crossing Detail)

TC 99-12 (Overhead Utility Encroachment Diagram)

TC 99-13 (Surface Restoration Methods)

TC 99-21 (Encroachment Permit General Notes and Specs.)

TC 99-22 (Agreement for Services to be Performed)

TC 99-23 (Mass Transit Shelter Specs. and Conditions)

Other Attachments (Specify): \_\_\_\_\_

**TYPE OF INDEMNITY:**  Bond  Cash

SELF-INSURED AMOUNT ENCUMBERED \$ \_\_\_\_\_

OTHER \_\_\_\_\_

**NAME AND ADDRESS OF LOCAL INSURANCE AGENCY OR SELF-INSURED REPRESENTATIVE:**

\_\_\_\_\_

**INDEMNITY:** The applicant, in order to secure this obligation, has deposited with the Transportation Cabinet as a guarantee of conformance with the Department's Encroachment Permit requirements, an indemnity in the amount of \$ \$500,000.00 as determined by the Department. It shall be the responsibility of the applicant or permittee, his heirs and assignees to keep all indemnities in full force until construction or reconstruction has been completed and duly accepted by an authorized agent of the Transportation Cabinet, Department of Highways.

**BRIEF DESCRIPTION OF WORK TO BE DONE.**

Columbia Gas Of KY. has attached plans proposing to install 1,625 feet of 12 inch steel gas main on State ROW crossing and adjacent to US 25, near Georgetown, Ky. Approximately seventy feet (70) will be installed by boring (with casing) under US 25, and the remainder 1,555 feet will be open cut in grass ROW. (see attached plans)

**IMPORTANT (PLEASE READ):** Applicant  does  does not intend to apply for excess R/W.

When the work is completed in accordance with the terms of this encroachment permit, your indemnity will be released. However, the permit is effective until revoked by the Transportation Cabinet and the terms on the permit accompanying permit documents and drawings remain in effect as long as the encroachment exists. **FUTURE MAINTENANCE OF THE ENCROACHMENT IS THE RESPONSIBILITY OF THE PERMITEE.** It is important that you understand the requirements of this encroachment permit application and accompanying documents. If you have not done so, it is suggested that you review these documents and place the permit package in a safe place for future reference.

A copy of this permit and all documents shall be given to your contractor and shall be readily available at the work site for the encroachment permit inspector to review at all times. Failure to meet this requirement may result in cancellation of this permit.

IN THE EVENT THIS APPLICATION IS APPROVED, THIS DOCUMENT SHALL CONSTITUTE A PERMIT FOR THE APPLICANT TO USE THE RIGHT-OF-WAY, BUT ONLY IN THE MANNER AUTHORIZED BY THIS DOCUMENT AND REGULATIONS OF THE DEPARTMENT AND THE DRAWINGS, PLANS, ATTACHMENTS, AND OTHER PERTINENT DATA ATTACHED HERETO AND MADE A PART HEREOF.

Permit No. \_\_\_\_\_

The permittee agrees to the following terms and conditions:

1. The permittee shall comply with and is bound by the requirements of the Department's Permits Manual as revised to and in effect on the date of the issuance of this permit which is made a part hereof by reference.
2. Permittee agrees that if the Department determines that vehicular capacity deficiencies or over capacity conditions develop as a result of the installation and use of this facility, the permittee shall adjust, relocate, or reconstruct the facilities and/or provide and bear the expenses for signs, auxiliary lanes, or other corrective measures reasonably deemed necessary by the Department and as set forth in the Department's Permit Manual within a reasonable length of time after receipt of written notice regarding such adjustments, relocation, additions, modifications, and/or corrective measures, such time to be specified in the notice. In cases where traffic signals are permitted or required, as determined by the Department, the costs for signal equipment and installation(s) shall be borne by the permittee and/or the Department in accordance with Department policy then in force as set forth in the Traffic Manual. Any modifications to the permittee's entrance necessary to accommodate signalization (including necessary easement(s) on private property) shall be the responsibility of the permittee, at no expense to the Department. (This applies only to Entrance Permits.)
3. The said encroachment will not infringe on the frontage rights of an abutting owner without written consent of the said owner as hereto: "I(we) consent to the granting of attached permit." \_\_\_\_\_  
Date \_\_\_\_\_ (This does not apply to utilities which serve the general public.)
4. Any permit granted hereunder shall be with the full understanding that it shall not interfere with any similar rights or permits heretofore granted to any other party except as otherwise provided by law.
5. A plan prepared by \_\_\_\_\_ and dated \_\_\_\_\_ is attached hereto and made a part hereof, which describes the facilities to be constructed by the permittee for which facilities this permit is granted. The permittee agrees as a condition to the issuance of the permit to construct and maintain such facilities in accordance with said plan, and the permittee shall not use the facilities authorized herein in any manner contrary to that prescribed by this permit and plan. Normal usage and routine maintenance only are authorized under this permit.
6. Permittee shall comply with the Manual on Uniform Traffic Control Devices as revised to and in effect on the date of the issuance of this permit which is made a part hereof by reference.
7. Permittee shall at all times from date when work is first commenced and until such time as all facilities are removed from the right-of-way premise, defend, protect, and save harmless the Department from all liability, claims, and demands arising out of work undertaken by the permittee pursuant to this permit, due to any negligent act or omission by the permittee, its servants, agents, employees, or contractors. This provision shall not inure to the benefit of any third party or operate to enlarge any liability of the Department beyond that existing at common law if this right to indemnity did not exist.
8. Upon a violation of any of the provisions of this permit, the Department may revoke the permit by giving notice to the permittee in writing to remove from the right-of-way any facilities placed thereon within a reasonable time as set forth in the notice, and in the event said facilities are not so removed, and the right-of-way restored the Department may cause same to be removed, and the costs thereof shall be charged to the permittee.
9. The permittee, his successors and assigns shall use the encroachment premises in compliance with all Federal requirements imposed pursuant to the provisions of the Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000-1) and regulations of the U.S. Department of Transportation as set forth in Title 49 C.F.R., Part 21, and as said regulations may be amended.
10. Permittee agrees that in the event it should become necessary, as may be reasonably determined by the Department, for the facilities covered by this permit to be removed or relocated in connection with the reconstruction, relocation, or improvement of the abutting highway, the Department may revoke this permit and require removal or relocation by the permittee at his own expense according and pursuant to the procedures provided in Paragraph 8 above except in those cases where the Department is required by law to pay any or all the same.
11. The permittee understands and agrees that this permit is personal to the permittee and shall not inure to his successors and assigns without the written approval of the Department that he is bound by the provisions of this permit as long as the encroachment exists unless a written release has been obtained from the Department. (Does not apply to utilities serving the general public.)
12. If the work authorized by this permit is on a project in the construction phase, it shall be the responsibility of the permittee to make personal contact with \_\_\_\_\_ Resident Engineer on the project to coordinate the permitted work with the State's prime contractor on the project.
13. This permit does not alleviate any requirements of any other government agency.
14. Permittee agrees to keep the priority route in which this permit was issued clear of dirt, mud, and debris during construction and for the life of this permit.

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**ANY ATTEMPT TO ALTER THIS FORM CONSITUTES A VOID PERMIT.**

THE UNDERSIGNED APPLICANT (being duly authorized representative/owner) DOES AGREE TO ALL TERMS AND CONDITIONS SET FORTH HEREIN.

<input checked="" type="checkbox"/> January 1st, 20 06	<input type="checkbox"/> July 1st, 20	April 20, 2005
Completion Date	Date	Signature

RECOMMENDED FOR APPROVAL

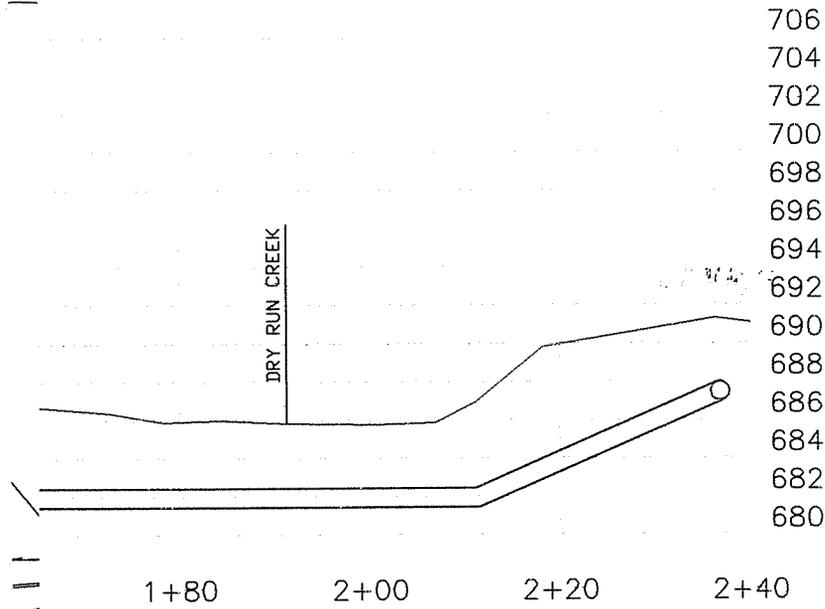
Title	Signature	Chief District Engineer	Date

PRIVATE ENTRANCE: TO BE COMPLETED BY PERSONNEL INSTALLING FACILITY.

Installed By: \_\_\_\_\_

Title	Signature	Date
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**ANY ATTEMPT TO ALTER THIS FORM CONSITUTES A VOID PERMIT.**



STATE OF KENTUCKY  
 JEFFERY K. PENDLETON  
 3512  
 LICENSED PROFESSIONAL LAND SURVEYOR

STATE OF KENTUCKY  
 LOWELL DUKE MARTIN  
 19518  
 LICENSED PROFESSIONAL ENGINEER

*Date: 4/22/05*

CONTROL PUBLIC IN  
 AREAS WITHIN STATE

*4/22/05*

PLAN SHOWING THE LOCATION OF  
 PROPOSED NATURAL GAS PIPELINE  
 FACILITIES IN CONJUNCTION WITH:  
 DE LINE EXTENSION PROJECT  
 (PORTION IN KY 25 PUBLIC RIGHT-OF-WAY)

OWN: GEORGTOWN	ENGINEER: DUKE MARTIN
HIP:	TECHNICIAN: DUKE MARTIN
SCOTT	CHECKED BY:
	FIELD BOOK/PAGE No.:
MARCH 2005	PS&I JOB ORDER NO.:
T No.1 OF 1	DRAWING No.